

ORIGINAL



MEMORANDUM

TO: Docket Control

FROM: Thomas M. Broderick
Director
Utilities Division

RECEIVED
AZ CORP COMMISSION
DOCKET CONTROL

2016 JAN 11 PM 4 11

DATE: January 11, 2016

RE: STAFF REPORT FOR ASH FORK DEVELOPMENT ASSOCIATION, INC.
DBA ASH FORK WATER SERVICE'S APPLICATION FOR A PERMANENT
RATE INCREASE AND FINANCING APPROVAL. (DOCKET NOS. W-
01004B-15-0313 AND W-01004B-15-0342)

Attached is the Staff Report for Ash Fork Development Association, Inc. dba Ash Fork Water Service's application for an increase in its rates and to incur long-term debt. Staff recommends approval of the rate application using Staff's recommended rates and charges. Staff recommends approval of the requested financing and the associated surcharge mechanism with conditions.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before January 21, 2016.

TMB:PNT:nr/WVC

Originator: Phan Tsan

Arizona Corporation Commission

DOCKETED

JAN 11 2016

DOCKETED BY	
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Service List for: Ash Fork Development, Inc. dba Ash Fork Water Service
Docket Nos. W-01004B-15-0313 & W-01004B-15-0342

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**STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION**

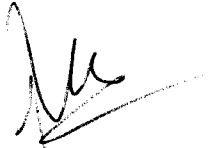
**ASH FORK DEVELOPMENT ASSOCIATION, INC. DBA
ASH FORK WATER SERVICE
DOCKET NOS. W-01004B-15-0313
AND W-01004B-15-0342**

**APPLICATION FOR A
PERMANENT RATE INCREASE
AND FINANCING APPROVAL**

JANUARY 11, 2016

STAFF ACKNOWLEDGMENT

The Staff Report for Ash Fork Development Association, Inc., dba Ash Fork Water Service, Docket Nos. W-01004B-15-0313 and W-01004B-15-0342, was the responsibility of the Staff members listed below. Phan Tsan was responsible for the financial review and analysis of the Company's application, rate base, revenue requirement, and rate design. Jian Liu was responsible for the engineering and technical analysis. Deb Reagan was responsible for reviewing the Commission's records on customer complaints filed with the Commission.



Phan Tsan
Public Utilities Analyst



Jian Liu
Utilities Engineer



Deb Reagan
Public Utilities Consumer Analyst

EXECUTIVE SUMMARY
ASH FORK DEVELOPMENT ASSOCIATION, INC. DBA
ASH FORK WATER SERVICE
DOCKET NOS. W-01004B-15-0313 & W-01004B-15-0342

Ash Fork Development Association, Inc., dba Ash Fork Water Service ("Ash Fork" or "Company") is a Class D water utility located 50 miles west of Flagstaff in Yavapai County, Arizona. Ash Fork provides potable water service to approximately 243 metered customers in its certificated area. Ash Fork's current rates were approved in Decision No. 71181, dated June 30, 2009.

On September 1, 2015, the Company filed an application for a permanent rate increase. Subsequently, on September 30, 2015, the Company also filed an application for financing approval.

The Company proposed a base rate increase \$35,295 or 12.69 percent increase over the test year revenue of \$278,069 to \$313,364. The Company proposed revenue would result in an operating income of \$20,874 for a 5.37 percent rate of return and an operating margin of 6.66 percent. The Company has proposed an original cost rate base ("OCRB") of \$388,740. The Company's proposed rates would increase the typical 5/8 x 3/4-inch meter residential bill, with a median usage of 2,951 gallons, from \$21.89 to \$24.18; an increase of \$2.29 or 10.46 percent. The Company's proposed rates actually produce operating revenue of \$336,786 based on Staff's bill analysis, which is \$23,422 more than its proposed revenue requirement for operating revenue.

Staff recommends a \$12,469 or 4.39 percent increase of the Staff adjusted test year revenue of \$284,270 to \$296,739. Staff's recommended revenue would result in an operating income of \$37,193 for a 7.93 percent rate of return and operating margin of 12.53 percent. Staff recommended an OCRB of \$468,857. Staff's recommended rates would increase the typical 5/8 x 3/4-inch meter residential bill, with a median usage of 2,951 gallons from \$21.89 to \$22.23, an increase of \$0.34 or 1.55 percent, without the loan surcharge.

The Company's financing application seeks authorization to incur long term debt from the Water Infrastructure Finance Authority of Arizona ("WIFA") in an amount not to exceed \$150,000 for Arsenic Treatment Equipment for Ash Fork Well No. 2. The Company did not include a request for a WIFA loan surcharge.

With regards to the WIFA Loan, Staff is recommending a WIFA loan surcharge that would generate estimated revenue of \$14,555, for a total revenue of approximately \$311,294 as shown on schedule PNT-1 and PNT-8. Once the WIFA loan surcharge is implemented, the typical 5/8 x 3/4-inch meter residential bill of \$22.23, inclusive of Staff's recommended base rate increase, would further increase by the amount of the surcharge \$3.02 to \$25.25.

Staff recommends

- Approval of the Staff recommended rates and charges as shown on Schedule PNT-4.
- That the Company file with Docket Control, as a compliance item in this Docket, a schedule of its approved rates and charges within 30 days after the Decision in this matter is issued.

- That the Company continue to use the depreciation rates by individual National Association of Regulatory Utility Commissioners ("NARUC") category presented in Table H-1 of the attached Engineering Report.
- Approval of the Company's application for authorization to issue long-term debt to WIFA in an amount not to exceed \$150,000 with one condition:
 - The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on Arsenic Treatment Equipment ("ATE").
- Approval of the associated surcharge mechanism that may result in a monthly surcharge up to the amount per customer as follows:

Meter Size	Monthly Surcharge
5/8" x 3/4" Meter	\$3.02
3/4" Meter	\$4.54
1" Meter	\$7.56
1½" Meter	\$15.12
2" Meter	\$24.20
3" Meter	\$45.37
4" Meter	\$75.62
6" Meter	\$151.24

- That the actual amount of the WIFA loan surcharge be calculated based upon the actual terms of the WIFA loan and actual number of customers at the time of loan closing.
- The Company file as a compliance item in this Docket, within 30 days of the execution of any financing transaction authorization herein, a notice confirming that such execution has occurred and a certification by an authorized Company representative that the terms of the financing fully comply with the authorizations granted.
- The Company provide to Staff, upon request, a copy of any loan documents executed pursuant to the authorizations granted herein.
- Upon filing of the loan closing notice, the Company may file in this Docket an application requesting implementation of the associated surcharge.
- Within 30 days of the filing of a surcharge implementation request, Staff shall calculate the appropriate WIFA surcharge and prepare and file a recommended order for expedited Commission consideration and approval.
- Approval of the loan and surcharge be rescinded if the Company has not started drawing funds from the loan within four years of the date of the Decision resulting from this proceeding.

- Upon approval of the WIFA surcharge, the Company shall open a separate interest-bearing account in which all surcharge monies collected from customers will be deposited.
- The only disbursement of funds from this account will be to make debt service, arsenic treatment related maintenance, and WIFA reserve payments to WIFA.
- That the Company be directed to record the customer-provided WIFA reserve funding in NARUC Account No. 253, "Other Deferred Credits" as soon as it begins collecting revenue from the surcharge. That the deferred credit be clearly noted as "Customer Provided Funding for WIFA Reserve Fund" on the Company's books and records, and that the net balance in this account continue to be shown as a regulatory liability until the balance is fully amortized or otherwise credited back to ratepayers.
- That the deferred credit balance related to the WIFA reserve payment be recognized as a reduction to the Company's rate base in future rate change filings and that the deferred credit balance will only be used to reduce the rate base to the extent that it does not result in a negative rate base amount.
- That the amortization of the deferred credit begin once the plant is placed in service, that the deferred credit be amortized for five years, and that the amortization expense be used to offset depreciation expense.
- That the Company, as a compliance item in this case, notify its customers of the authorized rates and charges approved in this proceeding, and their effective date, in a form acceptable to Staff, by means of an insert in its next regular scheduled billing and to file copies with Docket Control within 30 days of the date notice is sent to customers.

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ATTACHMENTS

Engineering Report.....	Attachment A
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FACT SHEET

Type of Ownership: Arizona non-profit "C" Corporation

Location: In Yavapai County about 50 miles west of Flagstaff, Arizona.

Rates: Permanent rate increase application filed September 1, 2015. The application became sufficient on October 27, 2015.

Current Rates: Decision No. 71181, dated June 30, 2009.

Current Test Year Ended: December 31, 2014.

Based on Residential 5/8 x 3/4-inch meter	Company Current <u>Rates</u>	Company Proposed <u>Rates</u>	Staff Recommended <u>Rates</u>
Monthly Minimum Charge	\$12.00	\$13.50	\$12.20
Gallons in minimum	0	0	0
Per 1,000 gallons			
Tier One from 1 gallon to 3,000 gallons	\$3.35	\$3.62	\$3.40
Tier Two from 3,001 gallons to 6,000 gallons	\$4.00	\$4.32	\$4.20
Tier Three all gallons over 6,000	\$4.66	\$5.03	\$5.00
Typical residential bill (Based on median usage of 2,951 gallons)	\$21.89	\$24.18	\$22.23

Customers:

Number of metered customers in the current test year	243
Number of permanent standpipe accounts in the current test year	246

Current test year customers by meter size:

5/8 x 3/4-inch	213
1-inch	12
1-1/2 inch	0
2-inch	16
3-inch	2
Coin operated 2-inch	N/A
Coin operated Filter Machine	N/A
Card operated Standpipe	246

Complaints:

A review of Consumer Service records reveals the following complaints and/or opinions filed from January 1, 2012 through November 24, 2015.

2015 – Zero Complaints

One Opinion – Opposed to the proposed rate increase

2014 – 2012 - Zero Complaints

Notifications:

Company mailed an Amended Customer Notification on October 1, 2015. The Affidavit of Mailing was docketed on October 8, 2015.

SUMMARY OF RATE FILING

On September 1, 2015, the Company filed an application for a permanent rate increase. Subsequently, on September 30, 2015, the Company also filed an application for financing approval. On October 27, 2015, the rate application was deemed sufficient by Staff.

The test year results as adjusted by Staff for Ash Fork show total operating revenue of \$284,270, an operating income of \$24,957, for 5.32 rate of return, as shown on Schedule PNT-1. The original cost rate base ("OCRB") as adjusted by Staff is \$468,857.

The Company proposed a \$35,295 or 12.69 percent increase over the test year revenue of \$278,069 to \$313,364. The Company proposed revenue would result in an operating income of \$20,874 for a 5.37 percent rate of return and an operating margin of 6.66 percent. The Company has proposed an OCRB of \$388,740. The Company's proposed rates would increase the typical 5/8 x 3/4-inch meter residential bill, with a median usage of 2,951 gallons, from \$21.89 to \$24.18; an increase of \$2.29 or 10.46 percent. The Company's proposed rates actually produce operating revenue of \$336,786 based on Staff's bill analysis, which is \$23,422 more than its proposed revenue requirement for operating revenue.

Staff recommends a \$12,469 or 4.39 percent increase over the Staff adjusted test year revenue of \$284,270 to \$296,739. Staff's recommended revenue would result in an operating income of \$37,193 for a 7.93 percent rate of return and an operating margin of 12.53 percent. Staff recommended an OCRB of \$468,857. In addition, Staff is recommending a WIFA loan surcharge that would generate estimated revenue of \$14,555, for total revenue of approximately \$311,294 as shown on schedule PNT-1 and PNT-8. Staff's recommended rates would increase the typical 5/8 x 3/4-inch meter residential bill, with a median usage of 2,951 gallons from \$21.89 to \$22.23, an increase of \$0.34 or 1.55 percent, without a loan surcharge. Once the WIFA loan surcharge is implemented, the typical 5/8 x 3/4-inch meter residential bill of \$22.23 would increase by the amount of the surcharge, \$3.02, to \$25.25. Staff's recommended rates with surcharge would increase the typical bill with a median usage of 2,951 gallons from \$22.23 to \$25.25, an increase of \$3.02, or 13.59 percent as shown on Schedule PNT-5.

BACKGROUND

Ash Fork is an Arizona class D utility engaged in the business of providing potable water service. Ash Fork is a non-profit corporation not subject to the payment of Federal or State of Arizona income taxes. Ash Fork was granted a Certificate of Convenience and Necessity ("CC&N") to provide water service per Decision No. 43321, effective May 23, 1973.

CONSUMER SERVICES

A review of the Consumer Services Section database for the Company from 2012 through 2014, revealed that there were no complaints, inquiries or opinions. In 2015, there were no complaints or inquiries and the one opinion was to oppose the rate increase.

COMPLIANCE

The Company has filed its Annual Reports and is in Good Standing with the Utilities Division and the Corporations Division of the Commission as of the date of this report.

A check of the Utilities Compliance Database indicates that there are no delinquencies for Ash Fork at this time. Therefore, Ash Fork is currently "in Compliance" with the Utilities Compliance Database.

ENGINEERING ANALYSIS

The water system was visited on November 17, 2015, by Mr. Jian Liu, Staff Utilities Engineer, in the accompaniment of Mr. Lewis Hume of the Company. A complete discussion of Staff's technical findings and recommendations along with a complete description of the Company's water system is provided in the attached Engineering Report.

RATE BASE

Staff's adjustments increased the Company's proposed rate base by \$80,117 from \$388,740 to \$468,857, as shown on Schedule PNT-2, page 1. Details of Staff's adjustments are discussed below.

Plant in Service

Adjustment "A" decreases plant in service by \$37,249 from \$2,206,566 to \$2,169,317, as shown on Schedule PNT-2, pages 1 and 2. During the course of the audit, Staff found that the invoices provided with the application did not match the level of plant additions reflected in the schedules contained in the application. Staff believes that third party generated invoices are the best reflection of actual cost; therefore, Staff made adjustments to plant additions to conform to actual invoices provided by the Company. Adjustment A consists of the following:

Electric Pumping Equipment- Adjustment "a" increases Electric Pumping Equipment account by \$20,922, from \$277,413 to \$298,335 as shown on Schedule PNT 2, page 2. Staff's adjusted amount reflects the \$277,413 balance established by Decision No. 71181 and \$20,922 increase in Electric Pumping Equipment to conform to supporting documentation.

As noted, Staff believes that the level of costs included on third party generated invoices should be used when quantifying additional plant captured in the Company's rate base.

Water Treatment Plant- Adjustment "b" decreases Water Treatment Plant account by \$7,015, from \$71,152 to \$64,137 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$64,137 balance established by Decision No. 71181 and removal of \$7,015 in Water Treatment Plant to conform to supporting documentation.

Distribution Reservoirs & Standpipes- Storage Tank- Adjustment "c" decreases Distribution Reservoirs & Standpipes account by \$2,412, from \$110,192 to \$107,780 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$107,780 balance established by Decision No. 71181 and removal of \$2,412 in Distribution Reservoirs & Standpipes to conform to supporting documentation.

Transmission & Distribution Mains- Adjustment "d" increases Transmission & Distribution Mains account by \$8,179, from \$782,343 to \$790,522 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$782,343 balance established by Decision No. 71181 and increasing by \$8,179 in Transmission & Distribution Mains to conform to supporting documentation.

Services - Adjustment "e" increases Services account by \$4,598, from \$7,434 to \$12,032 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$7,434 balance established by Decision No. 71181 and increasing by \$4,598 in Services to conform to supporting documentation.

Meters & Meter Installations - Adjustment "f" increases Meters & Meter Installations account by \$3,335, from \$21,864 to \$25,199 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$18,200 balance established by Decision No. 71181 and increasing by \$6,999 in Meters & Meter Installations to conform to supporting documentation.

Hydrants - Adjustment "g" decreases Hydrants account by \$2,953, from \$9,048 to \$6,095 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$6,095 balance established by Decision No. 71181 and removal of \$2,953 in Hydrants to conform to supporting documentation.

Other Plant and Miscellaneous Equipment - Adjustment "h" decreases Other Plant and Miscellaneous Equipment account by \$48,837, from \$55,346 to \$6,509 as shown on Schedule PNT-2 page 2. Staff's adjusted amount reflects the \$0 balance established in Decision No. 71181 and removal of \$48,837 in Other Plant and Miscellaneous Equipment to conform to supporting documentation.

Office Furniture & Fixtures - Adjustment "i" decreases Office Furniture & Fixtures account by \$15,435, from \$39,574 to \$24,139 as shown on Schedule PNT-2 page 2. Staff's adjusted amount reflects the \$26,023 balance established in Decision No. 71181, retirement of \$1,884, and removal of \$15,435 in Office Furniture & Fixtures to conform to supporting documentation.

Computer & Software - Adjustment "j" increases Computer & Software account by \$589, from \$0 to \$589 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$0 balance established by Decision No. 71181 and increasing by \$589 in Computer & Software to conform to supporting documentation.

Tools & Work Equipment – Adjustment “k” increases Tools & Work Equipment account by \$1,780, from \$24,337 to \$26,117 as shown on Schedule PNT-2, page 2. Staff’s adjusted amount reflects the \$23,555 balance established in Decision No. 71181 and \$2,562 plant additions to conform to supporting documentation.

Other Rate Base Items

Accumulated Depreciation

Adjustment “B” increases accumulated depreciation by \$81,420 from \$1,345,666 to \$1,427,086, as shown on Schedule PNT-2, pages 1 and 3. Staff’s adjusted amount reflects the \$847,877 balance established in Decision No. 71181 and Staff adjustments made to plant in service account balances.

Contribution In Aid of Construction (“CIAC”)

Adjustment “C” increases CIAC by \$87,988 from \$454,982 to \$542,970, and Amortization of CIAC by \$263,965, from \$0 to \$263,965 as shown on Schedule PNT-2, pages 1 and 4. Staff’s adjusted amounts reflect \$542,970 CIAC and \$87,988 Amortization of CIAC balance established in Decision No. 71181. Adjustments to Amortization of CIAC also reflect Staff’s calculation based on the composite depreciation rate of 4.63 percent established in Decision No. 71181.

Working Capital

Adjustment “D” increases Working Capital by \$22,810 from \$0 to \$22,810 as shown on schedule PNT-2, pages 1 and 4. This adjustment reflect Staff’s calculation of cash working capital based on Staff’s recommendations for Purchased Power and Operation and Maintenance expense. Staff used the formula method for this determination.

OPERATING INCOME STATEMENT

Operating Revenue

Staff’s adjustment to operating revenue resulted in an increase of \$6,201 from \$278,069 to \$284,270 as shown on Schedule PNT-3, pages 1 and 2.

Adjustment “1” reflects adjusted gross metered water revenue to include Revenue from services provided to Community Buildings owned by the Company that were not charged for the services used.

Adjustment “2” reflects adjusted Other Water Revenues to include late payments charges and retail sales.

Operating Expenses

Staff’s adjustments to operating expenses resulted in a net decrease of \$33,177, from \$292,490 to \$259,313, as shown on Schedule PNT-3, page 1. Details of Staff’s adjustments are presented below.

Depreciation Expense – Adjustment “3” decreases depreciation expense by \$20,705, from \$57,011 to \$36,306, as shown on Schedule PNT-3, pages 1, 2, and 3. Staff’s depreciation expense reflects application of Staff’s recommended depreciation rates to Staff’s recommended plant balances.

Taxes-Other than Income – Adjustment “4” decreases this account by \$12,247, from \$12,247 to \$0 as shown on Schedule PNT-3, page 1 and 2. This adjustment reflects the removal of sale taxes. It is not appropriate to include sale taxes in Operating Expenses since they were paid by Customers and not included in Revenue.

Property Tax Expense – Adjustment “5” decreases property tax expense by \$225, from \$16,118 to \$15,893 as shown on Schedule PNT-3, pages 1, 2 and 4. Staff calculated its property tax amount using a modified version of the Arizona Department of Revenue’s property tax method.

REVENUE REQUIREMENT

Staff recommends total base rates revenue of \$296,739, as shown on Schedule PNT-1. Staff’s recommendation is an increase of \$12,469 or 4.39 percent over Staff’s adjusted test year revenue of \$284,270. Staff’s recommended base rates revenue increase would produce an operating income of \$37,193 for a 12.53 percent operating margin. Staff’s recommended OCRB is \$468,857. Staff’s recommended rates and surcharges yield a cash flow of \$40,000 after payment of the debt service on current debt and the \$150,000 proposed loan, as shown on Schedule PNT-1 and PNT-8.

Staff’s total revenue requirement of \$311,294, including estimated surcharges, provides the Company with sufficient cash flow to pay operating expenses, contingencies, principal and interest on its current debt and proposed \$150,000 loan, and to meet the minimum 1.2 debt service coverage (“DSC”) ratio required by WIFA. Cash flow needs and DSC requirements determined the revenue requirement.

RATE DESIGN

Schedule PNT-4, pages 1 and 2 presents a complete list of the Company’s present, proposed, and Staff’s recommended rates and charges.

The Company proposed a rate structure that includes a monthly minimum charge that increases by meter size and an inverted three-tier commodity rates for all residential meter sizes with break-over points at 3,000 gallons and 6,000 gallons for all residential meter sizes, and an inverted two-tier commodity rate for all commercial meter sizes with break-over points at 6,000 gallons for all commercial meter sizes. The Company also proposed residential monthly minimum charges different than commercial monthly minimum charges. The Company’s proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 2,951 gallons from \$21.89 to \$24.18, for an increase of \$2.29, or 10.46 percent.

Staff recommended a rate structure that includes a monthly minimum charge that increases by meter size and inverted three-tier commodity rates for 5/8x 3/4 inch and 3/4 inch residential meters, and two-tier commodity rates for larger residential meters and all commercial meters. Staff recommends break-over points that increase by meter size. Staff also recommends residential or commercial customers that have the same meter sizes be charged the same monthly minimum rate.

Staff's recommended rates (excluding the WIFA loan surcharge) would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 2,951 gallons from \$21.89 to \$22.23, for an increase of \$0.34, or 1.55 percent. Once the WIFA loan surcharge is implemented, the typical 5/8 x 3/4-inch meter residential bill of \$22.23 would increase by the amount of the surcharge, \$3.02, to \$25.25. Staff recommended rates with surcharge would increase the typical bill with a median usage of 2,951 gallons from \$22.23 to \$25.25, an increase of \$3.02, or 13.59 percent.

MISCELLANEOUS SERVICE CHARGES

After Hours Service Charge – The Company proposed to increase After Hours Service Charge from \$9 to \$10. Staff recommended an increase from \$9 to \$30.

Meter Test (If correct) - The Company did not propose any change to its current Meter Test (If Correct) charge. Staff recommended a \$10 decrease to Meter Test (If Correct) charge, from \$40 to \$30.

SERVICE LINE AND METER INSTALLATION CHARGES

The Company proposed changes to its current service line and meter installation charges. Staff concurs with the Company's proposed service charges as shown on Schedule PNT-4, page 2.

FINANCING APPLICATION AND SURCHARGE MECHANISM

Purpose of the Requested Financing

The purpose of the application is to provide financing for Ash Fork to purchase new Arsenic Treatment Equipment for Well No. 2. The estimated cost is \$150,000.

Engineering Analysis

On October 26, 2015, ADEQ reported that the Ash Fork drinking water system is currently delivering water that meets water quality standards.

In light of declining arsenic measurements, Staff believes the Company should monitor the situation for one more year, prior to installing Arsenic Treatment Equipment ("ATE"). If arsenic exceeds 10 ppb after one year, Staff concludes that the Company's proposal to install ATE to treat Well No. 2 water is appropriate and its cost estimates reasonable. The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on ATE. A complete discussion of Staff's findings and recommendations concerning the financing application can be found in the attached Engineering Memorandum.

Financial Analysis

The proposed \$150,000 financing is a 20-year amortizing loan with an anticipated 5.25 percent interest rate. The payments are estimated to be \$1,010.77 per month, or \$12,129.20 annually, as shown on schedule PNT-7, page 2. Because the final details of the WIFA loan will not be known until after

the loan is closed, Staff is recommending a surcharge mechanism be approved but for a final determination of the amount for a filing due after closure of the loan.

Surcharge Mechanism

Schedule PNT-7 presents a calculation of the additional annual revenue needed by the Company to service a \$150,000 loan over 20 years at 5.25 percent interest rate for the loan. Based on Staff's calculation, \$150,000 of WIFA debt will require the Company to generate an annual cash flow of \$14,555 through the surcharge. Staff's calculation shows that a residential customer on a 5/8 x 3/4 inch meter will be required to pay a monthly surcharge of \$3.02.

The surcharge mechanism establishes the methodology for calculating the surcharge amount to be applied to the rates established in this rate application. Once the Company has closed on the loan, it would submit an application in this Docket requesting implementation of the surcharge. Staff would then calculate the appropriate surcharge and prepare and file a recommended order for expedited Commission consideration and approval.

WIFA Loan Debt Reserve

Staff has included a provision for the loan reserve fund in the WIFA loan surcharge that customers will pay as shown on Schedule 7. The loan reserve fund is a fund that the Company pays into for five years. After the five years, the balance will equal one year of principal and interest payments for the loan. When the reserve fund is included in the WIFA loan surcharge, as Staff has done, ratepayers will effectively "prepay" \$12,129 in funding that the utility will eventually use either to make loan payments, to pay for future maintenance, or this balance will be refunded to the Company. Ratepayers should be given credit for making these prepayments. Therefore, Staff recommends the following:

1. That the Company be directed to record the customer-provided WIFA reserve funding in NARUC Account No. 253, "Other Deferred Credits" as soon as it begins collecting revenue from the surcharge. That the deferred credit be clearly noted as "Customer Provided Funding for WIFA Reserve Fund" on the Company's books and records, and that the net balance in this account continue to be shown as a regulatory liability until the balance is fully amortized or otherwise credited back to ratepayers.
2. That the deferred credit balance be recognized as a reduction to the Company's rate base in future rate change filings and that the deferred credit balance will only be used to reduce the rate base to the extent that it does not result in a negative rate base amount.
3. That the amortization of the deferred credit begin once the plant is placed in service, that the deferred credit be amortized for five years, and that the amortization expense be used to offset depreciation expense.

Interest and Debt Service Coverage

Staff also examined the effects of the proposed financing on the Company's TIER and DSC.

DSC represents the number of times internally generated cash (i.e., earnings before interest, income tax, depreciation and amortization expenses) covers required principle and interest payments on debt. A DSC greater than 1.0 means operating cash flow is sufficient to cover debt obligations.

TIER represents the number of times earnings before income tax expense covers interest expense on debt. A TIER greater than 1.0 means that operating income is greater than interest expense. A TIER less than 1.0 is not sustainable in the long term but does not necessarily mean that debt obligations cannot be met in the short term.

Under Staff's recommended rates, fully drawing the Staff recommended \$150,000 loan, Ash Fork's after tax TIER and DSC are 2.00 and 2.05, respectively. The pro forma DSC and TIER shows that Ash Fork has adequate cash flow to meet all obligations on the Staff recommended loan and meets the WIFA 1.2 after tax DSC ratio requirement.

Capital Structure

Staff did not calculate Ash Fork's capital structure. However, the Company reported \$2,106,801 total capital includes the following components:

Common Stock Issued	\$477,560
Paid in Capital in Excess of Par Value	\$323,312
Retained Earnings	\$1,874,000
Proprietary Capital (Sole Props and Partnerships)	<u>(\$568,611)</u>
Total Capital	2,106,801

CONCLUSION

In light of declining arsenic measurements, Staff believes the Company should monitor the situation for one more year, prior to installing ATE. If arsenic exceeds 10 ppb after one year, Staff concludes that the Company's proposal to install ATE to treat Well No. 2 water is appropriate and its estimated cost of \$150,000 is reasonable.

Staff concludes that Ash Fork would have adequate cash flow to meet all obligations on the proposed \$150,000 debt.

Staff concludes that the proposed financing is for lawful purposes, within Ash Fork's powers as a corporation, compatible with the public interest, consistent with sound financial practices and will not impair its ability to provide public service.

Staff recommends approval of the Company's application for authorization to issue long-term debt to WIFA in amount not to exceed \$150,000 with the condition:

- The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on ATE.

STAFF RECOMMENDATIONS

Staff recommends:

- Approval of the Staff recommended rates and charges as shown on Schedule PNT-4.
- That the Company file with Docket Control, as a compliance item in this Docket, a schedule of its approved rates and charges within 30 days after the Decision in this matter is issued.
- That Ash Fork continue to use these depreciation rates by individual National Association of Regulatory Utility Commissioners category presented in Table H-1 of the attached Engineering Report.
- Approval of the Company's application for authorization to issue long-term debt to WIFA in amount not to exceed \$150,000 with one condition:
 - The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on ATE.
- Approval of the associated surcharge mechanism that may result in a monthly surcharge up to the amount per customer as follows:

Meter Size	Monthly Surcharge
5/8"x 3/4" Meter	\$3.02
3/4" Meter	\$4.54
1" Meter	\$7.56
1½" Meter	\$15.12
2" Meter	\$24.20
3" Meter	\$45.37
4" Meter	\$75.62
6" Meter	\$151.24

- That the actual amount of the WIFA loan surcharge be calculated based upon the actual terms of the WIFA loan and actual number of customers at the time of loan closing.
- The Company file as a compliance item in this Docket, within 30 days of the execution of any financing transaction authorization herein, a notice confirming that such execution has occurred and a certification by an authorized Company representative that the terms of the financing fully comply with the authorizations granted.
- The Company provide to Staff, upon request, a copy of any loan documents executed pursuant to the authorizations granted herein.

- Upon filing of the loan closing notice, the Company may file in this Docket an application requesting implementation of the associated surcharge.
- Within 30 days of the filing of a surcharge implementation request, Staff shall calculate the appropriate WIFA surcharge and prepare and file a recommended order for expedited Commission consideration and approval.
- Approval of the loan and surcharge be rescinded if the Company has not started drawing funds from the loan within two years of the date of the Decision resulting from this proceeding.
- Upon approval of the WIFA surcharge, the Company shall open a separate interest-bearing account in which all surcharge monies collected from customers will be deposited.
- The only disbursement of funds from this account will be to make debt service, arsenic treatment related maintenance, and WIFA reserve payments to WIFA.
- That the Company be directed to record the customer-provided WIFA reserve funding in NARUC Account No. 253, "Other Deferred Credits" as soon as it begins collecting revenue from the surcharge. That the deferred credit be clearly noted as "Customer Provided Funding for WIFA Reserve Fund" on the Company's books and records, and that the net balance in this account continue to be shown as a regulatory liability until the balance is fully amortized or otherwise credited back to ratepayers.
- That the deferred credit balance related to the WIFA reserve payment be recognized as a reduction to the Company's rate base in future rate change filings and that the deferred credit balance be used to reduce the rate base only to the extent that it does not result in a negative rate base amount.
- That the amortization of the deferred credit begin once the plant is placed in service, that the deferred credit would be amortized for five years, and that the amortization expense would be used to offset depreciation expense.
- That the Company, as a compliance item in this case, notify its customers of the authorized rates and charges approved in this proceeding, and their effective date, in a form acceptable to Staff, by means of an insert in its next regular scheduled billing and to file copies with Docket Control within 30 days of the date notice is sent to customers.

**SUMMARY OF OPERATING INCOME
ADJUSTED TEST YEAR AND STAFF RECOMMENDED**

	-- Present Rates --		Company Proposed as Filed	Staff Recommended	
	Company as Filed	Staff as Adjusted		Without Surcharge on \$150,000 loan	With Surcharge on \$150,000 loan
Revenues:					
Metered Water Revenue	\$ 275,469	\$ 280,057	\$ 310,764	\$ 292,526	\$ 292,526
Unmetered Water Revenue	2,181	2,181	2,181	2,181	2,181
Other Water Revenues	419	2,032	419	2,032	2,032
Estimated Surcharge Revenue					14,555
Total Operating Revenue	<u>\$ 278,069</u>	<u>\$ 284,270</u>	<u>\$ 313,364</u>	<u>\$ 296,739</u>	<u>\$ 311,294</u>
Operating Expenses:					
Operation and Maintenance	\$ 207,114	\$ 207,114	\$ 207,114	\$ 207,114	\$ 207,114
Depreciation	57,011	36,306	57,011	36,306	36,306
Property & Other Taxes	28,365	15,893	28,365	16,125	16,125
Income Tax	-	-	-		
Total Operating Expense	<u>\$ 292,490</u>	<u>\$ 259,313</u>	<u>\$ 292,490</u>	<u>\$ 259,546</u>	<u>\$ 259,546</u>
Operating Income/(Loss)	<u>\$ (14,421)</u>	<u>\$ 24,957</u>	<u>\$ 20,874</u>	<u>\$ 37,193</u>	<u>\$ 51,748</u>
Rate Base O.C.L.D.	\$ 388,740	\$ 468,857	\$ 388,740	\$ 468,857	\$ 468,857
Rate of Return - O.C.L.D.	-3.71%	5.32%	5.37%	7.93%	11.04%
Operating Margin	N/M	8.78%	6.66%	12.53%	16.62%
Cash Flow (After Debt Service)	\$ 9,090	\$ 27,763	\$ 44,385	\$ 40,000	\$ 40,000

ORIGINAL COST RATE BASE/FAIR VALUE

	----- Original Cost -----			
	Company	Adjustment		Staff
Plant in Service	\$ 2,206,566	\$ (37,249) A	\$	2,169,317
Less:				
Accum. Depreciation	1,345,666	81,420 B		1,427,086
Net Plant	\$ 860,900	\$ (118,669)	\$	742,231
Less:				
Plant Advances	2,100	-		2,100
Service Line and Meter Advances ("Meter Deposit")	15,078	-		15,078
Total Advances	17,178	-		17,178
Contributions Gross	454,982	87,988 C		542,970
Less:				
Amortization of CIAC	-	263,965 C		263,965
Net CIAC	454,982	(175,977)		279,005
Total Deductions	\$ 472,160	\$ (175,977)	\$	296,183
Plus:				
1/24 Power	-	1,540		1,540
1/8 Operation & Maint.	-	21,270		21,270
Inventory	-	-		-
Prepayments	-	-		-
Total Additions	\$ -	\$ 22,810 D	\$	22,810
Rate Base	\$ 388,740	\$ 80,117	\$	468,857

Explanation of Adjustment:

- A See Schedule PNT-2, page 2 of 4 Plant Adjustments
- B See Schedule PNT-2, page 3 of 4 Accumulated Depreciation Adjustments
- C See Schedule PNT-2, page 4 of 4 Staff Rate Base Adjustments
- D Ash Fork did not request a cash working capital allowance. Staff calculated a cash working capital allowance using Staff adjusted operating expenses.

PLANT ADJUSTMENT

	Company Exhibit	Adjustment	Staff Adjusted
301 Organization Costs	\$ -	\$ -	\$ -
302 Franchise Costs	-	-	-
303 Land & Land Rights	55,443	-	55,443
304 Structures & Improvements	86,125	-	86,125
307 Wells & Springs	508,699	-	508,699
311 Electric Pumping Equipment	277,413	20,922 a	298,335
320 Water Treatment Equipment	-	-	-
320.1 Water Treatment Plants	71,152	(7,015) b	64,137
320.2 Solutions & Feeders	-	-	-
320.3 Arsenic Remediation Plant	-	-	-
330 Distribution Reservoirs & Standpipes	-	-	-
330.1 Storage Tank	110,192	(2,412) c	107,780
330.2 Pressure Tanks	-	-	-
331 Transmission & Distribution Mains	782,343	8,179 d	790,522
333 Services	7,434	4,598 e	12,032
334 Meters & Meter Installations	21,864	3,335 f	25,199
335 Hydrants	9,048	(2,953) g	6,095
336 Backflow Prevention Devices	-	-	-
339 Other Plant & Misc. Equip.	55,346	(48,837) h	6,509
340 Office Furniture & Fixtures	39,574	(15,435) i	24,139
340.1 Computer & Software	-	589 j	589
341 Transportation Equipment	35,414	-	35,414
342 Store Equipment	-	-	-
343 Tools & Work Equipment	24,337	1,780 k	26,117
344 Laboratory Equipment	-	-	-
345 Power Operated Equipment	-	-	-
345 Communications Equipment	48,852	-	48,852
347 Miscellaneous Equipment	-	-	-
348 Other Tangibles	73,330	-	73,330
TOTALS	\$ 2,206,566	\$ (37,249) A	\$ 2,169,317

Explanation of Adjustment:

To reflect Decision No. 71181 beginning balance and to conform to supporting documentation

ACCUMULATED DEPRECIATION ADJUSTMENT

	<u>Amount</u>
B- Accumulated Depreciation - Per Company	\$ 1,345,666
Accumulated Depreciation - Per Staff	1,427,086
Total Adjustment	\$ 81,420

To reflect Decision No.71181 balance, Staff adjustments made to plant in service balance, and removal of depreciation accrued on fully depreciated plant.

ACCUMULATED DEPRECIATION			
<u>Description</u>	<u>Company</u> <u>Application</u>	<u>Staff</u> <u>Adjustment</u>	<u>Staff</u> <u>Calculated</u>
Organization Costs			
Franchise Costs			
Land & Land Rights			
Structures & Improvements	44,045	11,490	55,535
Wells & Springs	272,990	55,030	328,020
Electric Pumping Equipment	277,413	9,153	286,566
Water Treatment Equipment	49,745	(8,388)	41,357
Water Treatment Plants		-	
Solutions & Feeders		-	
Arsenic Remediation Plant		-	
Distribution Reservoirs & Standpipes	86,119	(25,045)	61,074
Storage Tank		-	
Pressure Tanks		-	
Transmission & Distribution Mains	405,136	26,793	431,929
Services	2,602	2,939	5,541
Meters & Meter Installations	18,823	1,343	20,166
Hydrants	1,759	1,604	3,363
Backflow Prevention Devices		-	
Other Plant & Misc. Equip.	55,346	(55,106)	240
Office Furniture & Fixtures	23,711	(2,731)	20,980
Computer & Software		589	589
Transportation Equipment	35,414	(4,235)	31,179
Store Equipment		-	
Tools & Work Equipment	23,711	(5,347)	18,364
Laboratory Equipment		-	
Power Operated Equipment		-	
Communications Equipment	48,852	-	48,852
Miscellaneous Equipment		-	
Other Tangibles		73,330	73,330
TOTALS	1,345,666	81,420	1,427,086

STAFF RATE BASE ADJUSTMENTS

C- Contribution in Aid of Construction ("CIAC") - Per Company	\$	454,982	
Per Staff		542,970	\$ 87,988

Amortization of CIAC- Per Company	\$	-	
Per Staff		263,965	\$ 263,965

	CIAC Balance Decision	Amortization Decision	Composite Depreciation Rate Decision
	<u>71181</u>	<u>71181</u>	<u>71181</u>
12/31/2007	\$ 542,970	\$ 87,988	4.63%
2008		25,140	
2009		25,140	
2010		25,140	
2011		25,140	
2012		25,140	
2013		25,140	
2014		25,140	
		<u>\$ 263,965</u>	

D- WORKING CAPITAL (1/24 purchased power and 1/8 operation & Maint exp. Portion of cash working capital formula method)- Per company	\$	-	
Per Staff		22,810	\$ 22,810

To reflect Staff's calculation of cash working capital based on Staff's
recommendations for purchased power and operation and maintenance expense

STATEMENT OF TEST YEAR OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted
Revenues:			
461 Metered Water Revenue	\$ 275,469	\$ 4,588 1	\$ 280,057
460 Unmetered Water Revenue	2,181	-	2,181
474 Other Water Revenues	419	1,613 2	2,032
Total Operating Revenue	\$ 278,069	\$ 6,201	\$ 284,270
Operating Expenses:			
601 Salaries and Wages	112,043	-	112,043
610 Purchased Water	-	-	-
615 Purchased Power	36,956	-	36,956
618 Chemicals	-	-	-
620 Repairs and Maintenance	21,667	-	21,667
621 Office Supplies & Expense	1,690	-	1,690
630 Outside Services	6,218	-	6,218
635 Water Testing	2,657	-	2,657
641 Rents	2,607	-	2,607
650 Transportation Expenses	5,007	-	5,007
657 Insurance - General Liability	12,317	-	12,317
659 Insurance - Health and Life	3,611	-	3,611
666 Regulatory Commission Expense - Rate Case	-	-	-
675 Miscellaneous Expense	2,341	-	2,341
403 Depreciation Expense	57,011	(20,705) 3	36,306
408 Taxes Other Than Income	12,247	(12,247) 4	-
408.11 Property Taxes	16,118	(225) 5	15,893
409 Income Tax	-	-	-
Total Operating Expenses	\$ 292,490	\$ (33,177)	\$ 259,313
OPERATING INCOME/(LOSS)	\$ (14,421)	\$ 39,378	\$ 24,957
Other Income/(Expense):			
419 Interest and Dividend Income	\$ 465	\$ -	\$ 465
421 Non-Utility Income	10,444	(1,613) 2	8,831
427 Interest Expense	18,136	-	18,136
426 Miscellaneous Non-Utility Expense	14,383	-	14,383
Total Other Income/(Expense)	(21,610)	(1,613)	(23,223)
NET INCOME/(LOSS)	\$ (36,031)	\$ 37,765	\$ 1,734

STAFF ADJUSTMENTS

1 -	METERED WATER REVENUE - Per Company Per Staff	\$ 275,469 <u>280,057</u>	<u>\$ 4,588</u>
	To include Revenue from services provided to Community Buildings owned by the Company that were not charged for the services used.		
2 -	OTHER WATER REVENUES - Per Company Per Staff	\$ 419 <u>2,032</u>	<u>\$ 1,613</u>
	To include Late Payment Charges and Retail Sales		
	NON-UTILITY INCOME - Per Company Per Staff	\$ 10,444 <u>8,831</u>	<u>\$ (1,613)</u>
	To reclassify Late Payment Charges and Retail Sales to Other Water Revenues		
3 -	DEPRECIATION - Per Company Per Staff	\$ 57,011 <u>36,306</u>	<u>\$ (20,705)</u>
	To reflects application of Staff's recommended depreciation rates to Staff's recommended plant balances.		
4 -	TAXES OTHER THAN INCOME - Per Company Per Staff	\$ 12,247 <u>-</u>	<u>\$ (12,247)</u>
	To remove sale taxes		
5 -	PROPERTY TAXES - Per Company Per Staff	\$ 16,118 <u>15,893</u>	<u>\$ (225)</u>
	To reflect property tax expense using the Arizona Department of Revenue property method.		

OPERATING INCOME ADJUSTMENT No. 3 - DEPRECIATION EXPENSE

LINE NO.	ACCT NO.	DESCRIPTION	UTILITY PLANT IN SERVICE BALANCES	FULLY/ NON-DEPRECIABLE PLANT BALANCES	DEPRECIABLE PLANT IN SERVICE	DEPREC. RATE	DEPRECIATION EXPENSE
1	301	Organization Costs	\$ -		\$ -	0.00%	\$ -
2	302	Franchise Costs	-		-	0.00%	-
3	303	Land & Land Rights	55,443	55,443	-	0.00%	-
4	304	Structures & Improvements	86,125		86,125	3.33%	2,868
5	307	Wells & Springs	508,699		508,699	3.33%	16,940
6	311	Electric Pumping Equipment	298,335	277,413	20,922	12.50%	2,615
7	320	Water Treatment Equipment	-		-		-
8	320.1	Water Treatment Plants	64,137		64,137	3.33%	2,136
9	320.2	Solutions & Feeders	-		-	20.00%	-
10	320.3	Arsenic Remediation Plant	-		-		-
11	330	Distribution Reservoirs & Standpipes	-		-		-
12	330.1	Storage Tank	107,780		107,780	2.22%	2,393
13	330.2	Pressure Tanks	-		-	5.00%	-
14	331	Transmission & Distribution Mains	790,522		790,522	2.00%	15,810
15	333	Services	12,032		12,032	3.33%	401
16	334	Meters & Meter Installations	25,199	18,200	6,999	8.33%	583
17	335	Hydrants	6,095		6,095	2.00%	122
18	336	Backflow Prevention Devices	-		-	6.67%	-
19	339	Other Plant & Misc. Equip.	6,509		6,509	6.67%	434
20	340	Office Furniture & Fixtures	24,139		24,139	6.67%	1,610
21	340.1	Computer & Software	589	589	-	20.00%	-
22	341	Transportation Equipment	35,414	29,364	6,050	20.00%	1,210
23	342	Store Equipment	-		-	4.00%	-
24	343	Tools & Work Equipment	26,117		26,117	5.00%	1,306
25	344	Laboratory Equipment	-		-	10.00%	-
26	345	Power Operated Equipment	-		-	5.00%	-
27	345	Communications Equipment	48,852	48,852	-	10.00%	-
28	347	Miscellaneous Equipment	-		-	10.00%	-
29	348	Other Tangible Plant	73,330	73,330	-	10.00%	-
30		Total	\$ 2,169,317	\$ 503,191	\$ 1,666,126		\$ 48,427
31		Less: Amortization of Contributions			\$ 542,970	2.23%	\$ 12,121
32		Staff Recommended Depreciation Expense					\$ 36,306
32		Company Proposed Depreciation Expense					57,011
33		Increase/(Decrease) to Depreciation Expense					<u>(20,705)</u>

OPERATING INCOME ADJUSTMENT No. 5 - PROPERTY TAXES

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	\$ 284,270	\$ 284,270
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	\$ 568,540	\$ 568,540
4	Staff Recommended Revenue	\$ 284,270	\$ 296,739
5	Subtotal (Line 4 + Line 5)	\$ 852,810	\$ 865,279
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	\$ 284,270	\$ 288,426
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	\$ 568,540	\$ 576,853
10	Plus: 10% of CWIP	-	-
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	\$ 568,540	\$ 576,853
13	Assessment Ratio	18.00%	18.00%
14	Assessment Value (Line 12 * Line 13)	\$ 102,337	\$ 103,833
15	Composite Property Tax Rate - Obtained from ADOR	15.53010%	15.53010%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	\$ 15,893	
17	Company Proposed Property Tax	15.53%	
18	Staff Test Year Adjustment (Line 16 - Line 17)	\$ 15,893	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 16,125
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		15,893
21	Increase in Property Tax Due to Increase in Revenue Requirement		\$ 232
22			
23	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		\$ 232
24	Increase in Revenue Requirement		\$ 12,469
25	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.863612%

RATE DESIGN

<u>Monthly Usage Charge</u>	<u>Present Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
5/8"x 3/4" Meter	\$12.00	\$13.50	\$12.20
3/4" Meter	\$12.00	\$13.50	\$18.00
1" Meter	\$18.00	\$21.00	\$30.00
1½" Meter	\$24.00	\$32.00	\$60.00
2" Meter	\$35.00	\$44.00	\$75.00
3" Meter	\$55.00	\$70.00	\$180.00
4" Meter	\$100.00	\$125.00	\$300.00
6" Meter	\$120.00	\$150.00	\$600.00
<u>WIFA Loan Monthly Surcharge</u>			
5/8"x 3/4" Meter	N/A	N/A	TBD
3/4" Meter	N/A	N/A	TBD
1" Meter	N/A	N/A	TBD
1½" Meter	N/A	N/A	TBD
2" Meter	N/A	N/A	TBD
3" Meter	N/A	N/A	TBD
4" Meter	N/A	N/A	TBD
6" Meter	N/A	N/A	TBD
<u>Commodity Rates (Per 1,000)</u>			
<u>Residential-All Meter Sizes</u>			
First 3,000 Gallons	\$3.35	\$3.62	N/A
From 3,001 to 6,000 Gallons	\$4.00	\$4.32	N/A
Over 6,000 Gallons	\$4.66	\$5.03	N/A
<u>Commercial-All Meter Sizes</u>			
First 6,000 Gallons	\$4.00	\$4.32	N/A
Over 6,000 Gallons	\$4.66	\$5.03	N/A
<u>5/8 x 3/4" & 3/4" Meter- Residential</u>			
First 3,000 Gallons	\$3.35	\$3.62	\$3.40
From 3,001 to 6,000 Gallons	\$4.00	\$4.32	\$4.20
Over 6,000 Gallons	\$4.66	\$5.03	\$5.00
<u>5/8 x 3/4" & 3/4" Meter- Commercial</u>			
First 6,000 Gallons	N/A	N/A	\$4.20
Over 6,000 Gallons	N/A	N/A	\$5.00
<u>1" Meter - Residential and Commercial</u>			
First 20,000 gallons	N/A	N/A	\$4.20
Over 20,000 gallons	N/A	N/A	\$5.00
<u>1½" Meter-Residential and Commercial</u>			
First 55,000 gallons	N/A	N/A	\$4.20
Over 55,000 gallons	N/A	N/A	\$5.00
<u>2" Meter -Residential and Commercial</u>			
First 72,000 gallons	N/A	N/A	\$4.20
Over 72,000 gallons	N/A	N/A	\$5.00
<u>3" Meter-Residential and Commercial</u>			
First 200,000 gallons	N/A	N/A	\$4.20
Over 200,000 gallons	N/A	N/A	\$5.00
<u>4" Meter-Residential and Commercial</u>			
First 340,000 gallons	N/A	N/A	\$4.20
Over 340,000 gallons	N/A	N/A	\$5.00
<u>6" Meter-Residential and Commercial</u>			
First 700,000 gallons	N/A	N/A	\$4.20
Over 700,000 gallons	N/A	N/A	\$5.00

RATE DESIGN (cont.)

<u>Standpipe/Bulk</u>				
Per 1,000 Gallons	\$9.20		\$12.00	\$9.50
<u>Coin-Operated Standpipe</u>				
Per 25 Gallons	0.25		N/A	0.25
Per 20 gallons	N/A		0.25	N/A
<u>Filtered Water Dispenser</u>				
Per Gallon	0.25		0.25	0.25

Service Line and Meter Installation Charges

Meter Sizes	Current Total Charges	Company Proposed Total Charges	Staff Recommended Service Line Charges	Staff Recommended * Meter Charges	Staff Recommended Total Charges
5/8" x 3/4" Meter	\$350	\$380	\$290	\$90	\$380
3/4" Meter	350	380	290	90	380
1" Meter	420	450	310	140	450
1½" Meter	900	950	500	450	950
2" Meter	1,340	1,400	660	740	1,400
3" Meter	2,100	2,200	900	1,300	2,200
4" Meter	2,800	3,000	1,200	1,800	3,000
6" Meter	\$3,600	\$3,750	\$1,250	\$2,500	\$3,750

<u>Service Charges</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Staff Recommended</u>
Establishment	\$20.00	\$20.00	\$20.00
Establishment (After Hours)	\$24.00	N/A	N/A
After Hours Service Charge	N/A	\$10.00	\$30.00
Reconnection (Delinquent)	\$15.00	\$15.00	\$15.00
Reconnection (Delinquent, After Hours)	\$24.00	N/A	N/A
Meter Test (If Correct)	\$40.00	\$40.00	\$30.00
Deposit	*	*	*
Deposit Interest	*	*	*
Re-Establishment (Within 12 Months)	**	**	**
NSF Check	\$15.00	\$15.00	\$15.00
Deferred Payment	N/A	N/A	N/A
Meter Re-Read (If Correct)	\$10.00	\$10.00	\$10.00
Late Fee (Per month)	1.50%	1.50%	1.50%
Monthly Service Charge for Fire Sprinkler	***	***	***
* Per Commission Rules (R14-2-403.B)			
** Months off system times the minimum (R14-2-403.D)			
*** 1.00% of Monthly Minimum for a Comparable Sized Meter Connection, but no less than \$5.00 per month. The Service Charge for Fire Sprinklers is only applicable for service lines separate and distinct from the primary water service line.			

In addition to the collection of its regular rates and charges, the Company shall collect from its customers their proportionate share of any privilege, sale or use tax in accordance with R14-2-409.D.5

TYPICAL BILL ANALYSIS

General Service 5/8 X 3/4 - Inch Meter
(Without WIFA Loan Surcharge)

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	3,889	\$ 25.61	\$ 28.20	\$ 2.59	10.11%
Median Usage	2,951	\$ 21.89	\$ 24.18	\$ 2.29	10.46%
Staff Recommend	Gallons	Present Rates	Recommended Rates	Dollar Increase	Percent Increase
Average Usage	3,889	\$ 25.61	\$ 26.13	\$ 0.52	2.03%
Median Usage	2,951	\$ 21.89	\$ 22.23	\$ 0.34	1.55%

Present & Proposed Rates (Without Taxes)
General Service 5/8 X 3/4 - Inch Meter

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Recommended Rates	% Increase
0	\$ 12.00	\$ 13.50	12.50%	\$ 12.20	1.7%
1,000	15.35	17.12	11.53%	15.60	1.6%
2,000	18.70	20.74	10.91%	19.00	1.6%
3,000	22.05	24.36	10.48%	22.40	1.6%
4,000	26.05	28.68	10.10%	26.60	2.1%
5,000	30.05	33.00	9.82%	30.80	2.5%
6,000	34.05	37.32	9.60%	35.00	2.8%
7,000	38.71	42.35	9.40%	40.00	3.3%
8,000	43.37	47.38	9.25%	45.00	3.8%
9,000	48.03	52.41	9.12%	50.00	4.1%
10,000	52.69	57.44	9.01%	55.00	4.4%
15,000	75.99	82.59	8.69%	80.00	5.3%
20,000	99.29	107.74	8.51%	105.00	5.8%
25,000	122.59	132.89	8.40%	130.00	6.0%
50,000	239.09	258.64	8.18%	255.00	6.7%
75,000	355.59	384.39	8.10%	380.00	6.9%
100,000	472.09	510.14	8.06%	505.00	7.0%

TYPICAL BILL ANALYSIS

General Service 5/8 X 3/4 - Inch Meter
(With WIFA Loan Surcharge)

Staff Recommended		Recommended Rates (without Surcharge)	Recommended Rates (with Surcharge)	Dollar Increase	Percent Increase
Average Usage	3,889	\$ 26.13	\$ 29.15	\$ 3.02	11.58%
Median Usage	2,951	22.23	25.25	\$ 3.02	13.59%

General Service 5/8 x 3/4-Inch Meter
(Without Tax)

Gallons	Recommended Rates (without Surcharge)	%	Recommended Rates (with Surcharge)	%
<u>Consumption</u>				<u>Increase</u>
0	\$ 12.20		\$ 15.22	24.75%
1,000	15.60		18.62	19.36%
2,000	19.00		22.02	15.89%
3,000	22.40		25.42	13.48%
4,000	26.60		29.62	11.35%
5,000	30.80		33.82	9.81%
6,000	35.00		38.02	8.63%
7,000	40.00		43.02	7.55%
8,000	45.00		48.02	6.71%
9,000	50.00		53.02	6.04%
10,000	55.00		58.02	5.49%
15,000	80.00		83.02	3.78%
20,000	105.00		108.02	2.88%
25,000	130.00		133.02	2.32%
30,000	155.00		158.02	1.95%
35,000	180.00		183.02	1.68%
40,000	205.00		208.02	1.47%
45,000	230.00		233.02	1.31%
50,000	255.00		258.02	1.18%
75,000	380.00		383.02	0.79%
100,000	505.00		508.02	0.60%

Cash Flow Analysis

Line No.		<i>Company <u>As Filed</u></i>	<i>Company <u>Proposed</u></i>	<i>Staff <u>Adjusted</u></i>	<i>Staff <u>Recommended</u></i>
1	Operating Revenue:	\$ 278,069	\$ 313,364	\$ 284,270	\$ 296,739
2	Operating Expenses:				
3	Operation and Maintenance	207,114	207,114	\$ 207,114	207,114
4	Depreciation	57,011	57,011	36,306	36,306
5	Property & Other Taxes	28,365	28,365	15,893	16,125
6	Income Tax	-	-	-	-
7	Total Operating Expense	292,490	\$ 292,490	\$ 259,313	\$ 259,545
8					
9	Operating Income	(\$14,421)	\$ 20,874	\$ 24,957	\$ 37,194
10					
11	Interest Expense	18,136	\$ 18,136	\$ 18,136	\$ 18,136
12					
13	Principal Repayment	12,793	\$ 12,793	\$ 12,793	\$ 12,793
14					
15	Refund of Advance	\$ 2,571	\$ 2,571	\$ 2,571	\$ 2,571
16					
17	Cash Flow : (L9+L4-L11-L13-L15)	\$ 9,090	\$ 44,385	\$ 27,763	\$ 40,000
18					
19	DSC				
20	Before Tax : (L9+L4+L6)÷(L11+L13)	1.38	2.52	1.98	2.38
21	After Tax : (L9+L4)÷(L11+L13)	1.38	2.52	1.98	2.38

WIFA LOAN SURCHARGE CALCULATION

Loan Amount: **\$150,000**
Term: **20**
Interest Rate Before Subsidy
WIFA Subsidy Rate:
WIFA Interest rate: **5.25%** If interest rate is not found on TABLE A, use the next highest percentage

Step 1 - Find the Principal and Interest Components of the Annual Surcharge Revenue

\$4,358 Principal (From Loan Amortization Schedule)
7,771 Plus: Interest (From Loan Amortization Schedule)
\$12,129 Debt Service Component of the Annual Surcharge Revenue

Step 2 - Find the Gross Revenue Conversion Factor

0

Step 3 - Find the Incremental Income Tax Factor

0.0

Step 4 - Find the Annual Income Tax Component of Surcharge Related to Principle

0 Incremental Income Tax Factor
\$4,358 Multiplied by : Annual Principal Payment on Loan from Step 1 (Note: Interest Expense is tax deductible)
\$0 Annual Income Tax Component Related to the Principles

Step 5 - Find the Annual Income Tax Component of Surcharge Related to Depreciation Expense

0 Incremental Income Tax Factor
\$36,306 Multiplied by : Depreciation Expense
0 Annual Income Tax Component of Surcharge Related to Depreciation Expense

Step 6 - Find the Net Annual Income Tax Component of Surcharge

0 Annual Income Tax Component Related to the Principles
0 Less: Annual Income Tax Component of Surcharge Related to Depreciation Expense
0 Net Annual Income Tax Component of Surcharge

Step 7 - Find the Annual Surcharge Revenue Requirement Needed for the Loan Including Reserve Fund

\$0 Net Annual Income Tax Component of the Annual Surcharge Revenue (from Step 6)
12,129 Plus: Debt Service Component of the Annual Surcharge Revenue (from Step 1)
2,426 Plus: Annual Reserve Fund Deposit [20% x Principal & Interest (From Step1)]
\$14,555 Total Annual Surcharge Revenue Requirement for the Loan

Step 8 - Find the Equivalent Bills

Equivalent Bills

Col A	Col B	Col C	Col D	Col E
Meter Size	NARUC Multiplier	Number of Customers	Number of Months in Year	Equivalent Bills Col B x C x D
5/8" x 3/4" Me	1	213	12	2,556
3/4" Meter	1.5	0	12	-
1" Meter	2.5	12	12	360
1 1/2" Meter	5	0	12	-
2" Meter	8	16	12	1,536
3" Meter	15	2	12	360
4" Meter	25	0	12	-
6" Meter	50	0	12	-
		243		4,812

Step 9 - Find the Monthly Surcharge for the 5/8" x 3/4" Meter Size Customers

\$14,555 Total Annual Surcharge Revenue Requirement for the Loan (from Step 8)
4,812 Divided by: Total Number of Equivalent Bills
\$3.02 Monthly Surcharge for 3/4" Customers

Step 10 - Find the Monthly Surcharge for the Remaining Meter Size Customers

Equivalent Bills

Col A	Col B	Col C	Col D
Meter Size	NARUC Multiplier	5/8" x 3/4" Customers' Surcharge	Surcharge by Meter Size Col B x C
5/8" x 3/4" Me	1	\$3.02	\$3.02
3/4" Meter	1.5	\$3.02	\$4.54
1" Meter	2.5	\$3.02	\$7.56
1 1/2" Meter	5	\$3.02	\$15.12
2" Meter	8	\$3.02	\$24.20
3" Meter	15	\$3.02	\$45.37
4" Meter	25	\$3.02	\$75.62
6" Meter	50	\$3.02	\$151.24

Ash Fork Development Association, Inc., dba Ash Fork Water Service
Docket Nos. W-01004B-15-0313 & W-01004B-15-0342
Test Year Ended December 31, 2014.

Schedule PNT-7
Page 2 of 2

WIFA LOAN DATA:

Loan Amount Requested	\$150,000		
Down Payment:	\$0		
Amount Financed:	\$150,000		
Number of years:	20	Compounding Periods:	12
Interest rate (r):	5.25%	APR:	5.38%

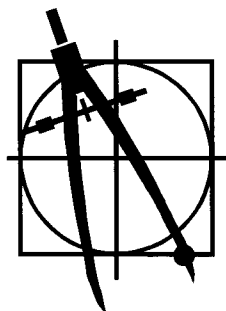
LOAN AMORTIZATION SCHEDULE

Period	Loan payment (1)	Beginning- of-month principal (2)	Payments		End-of-month principal [(2) - (4)] (5)	Annual Interest (6)	Annual Principal (7)	Annual Debt Payment (8)
			Interest [r * (2)] (3)	Principal [(1) - (3)] (4)				
1	\$1,010.77	\$150,000.00	\$656.25	\$354.52	\$149,645.48			
2	1,010.77	149,645.48	654.70	356.07	149,289.42			
3	1,010.77	149,289.42	653.14	357.63	148,931.79			
4	1,010.77	148,931.79	651.58	359.19	148,572.60			
5	1,010.77	148,572.60	650.01	360.76	148,211.84			
6	1,010.77	148,211.84	648.43	362.34	147,849.50			
7	1,010.77	147,849.50	646.84	363.92	147,485.58			
8	1,010.77	147,485.58	645.25	365.52	147,120.06			
9	1,010.77	147,120.06	643.65	367.12	146,752.94			
10	1,010.77	146,752.94	642.04	368.72	146,384.22			
11	1,010.77	146,384.22	640.43	370.34	146,013.89			
12	1,010.77	146,013.89	638.81	371.96	145,641.93	7,771	4,358	12,129.20

WIFA LOAN FINANCIAL ANALYSIS

Test year Income Statement and Capital Structure and Pro Forma
Including Immediate Effects of the Proposed Debt

	Pro forma <u>Permanent Rates</u>	Pro Forma <u>With Surcharge</u>
1 Metered Water Revenue	\$ 292,526	\$ 292,526
2 Unmetered Water Revenue	2181	2,181
3 Other Water Revenues	2032	2,032
4 Estimated Surcharge Revenue	0	14,555
5 Operating Revenue:	<u>\$ 296,739</u>	<u>\$ 311,294</u>
6 Operating Expenses:		
7 Operation and Maintenance	207,114	207,114
8 Depreciation	36,306	36,306
9 Property & Other Taxes	16,125	16,125
10 Income Tax	-	-
11 Total Operating Expense	<u>\$259,545</u>	<u>\$259,545</u>
12		
13 Operating Income	\$37,193.71	\$51,748.71
14		
15 Interest Expense	\$18,136	25,907
16		
17 Principal Repayment	\$12,793	17,151
18		
19 Reserve/Replacement Deposit	\$0	\$2,426
20		
21 Refund of Advance	\$2,571	\$2,571
22		
23 Cash Flow	\$40,000	\$40,000
24		
25 TIER		
26 [10+13] ÷ [15]	2.05	2.00
27 DSC		
28 [8+10+13] ÷ [15+17]	2.38	2.05
29 Cash Coverage Ratio		
30 [8+10+13] ÷ [15]	4.05	3.40
31		



Engineering Report for:
Ash Fork Development Association, Inc.
dba Ash Fork Water Service
Docket Nos. W-01004B-15-0313(Rates) &
W-01004B-15-0342(Financing)
By: Jian W Liu
Utilities Engineer

December 4, 2015

EXECUTIVE SUMMARY

CONCLUSIONS:

1. The Arizona Department of Environmental Quality ("ADEQ") reported that the Ash Fork Development Association, Inc. ("Ash Fork" or "Company") Public Water System ("PWS") No. 13-008, is currently delivering water that meets water quality standards required by 40 C.F.R. 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code ("A.A.C."), Title 18, Chapter 4. (ADEQ compliance status report dated October 26, 2015).
2. The Company is not located in an Active Management Area ("AMA") and is not subject to Arizona Department of Water Resources ("ADWR") AMA reporting and conservation requirements. ADWR reported that Ash Fork is currently in compliance with departmental requirements governing water providers and/or community water systems. (ADWR compliance status report dated December 4, 2015).
3. A check with the Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Compliance Section showed no delinquent compliance items for the Company. (ACC Compliance Section Email dated October 8, 2015).
4. The Company has an approved curtailment tariff on file with the Commission.
5. The Company has an approved backflow prevention tariff on file with the Commission.
6. The existing water system has adequate well production and storage capacity to serve the existing connections and reasonable growth.
7. In light of declining arsenic measurements, Staff believes the Company should monitor the situation for one more year, prior to installing Arsenic Treatment Equipment ("ATE"). If arsenic exceeds 10 ppb after one year, Staff concludes that the Company's proposal to install ATE to treat Well No. 2 water is appropriate and its cost estimates reasonable. The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on ATE.

RECOMMENDATIONS

1. Staff recommends an average annual cost of \$2,543 be adopted for the water testing expense in this proceeding.
2. In the prior rate case, the Company adopted Staff's typical and customary water depreciation rates. These rates are presented in Table H-1 and it is recommended that the Company continue to use these depreciation rates by individual National Association of Regulatory Utility Commissioners ("NARUC") category.
3. Staff recommends that the Company charge separate service line and meter installation charges. The separate service line charges and meter charges recommended by Staff are listed in Table L-1.
4. Staff recommends that Ash Fork be required to file with Docket Control, as a compliance item in this docket, within 90 days of the effective date of the Commission's Decision in this matter, at least three Best Management Practices ("BMPs") in the form of tariffs that substantially conform to the templates created by Staff and available at the Commission's website.. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

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A. INTRODUCTION AND LOCATION OF COMPANY

On September 1, 2015, Ash Fork Development Association dba Ash Fork Water Service (“Ash Fork” Or “Company”) filed an application with the Arizona Corporation Commission (“ACC” or “Commission”) requesting authorization to increase its rates (“Rate Application”). On September 30, 2015, Ash Fork filed an application with Commission requesting authorization to incur long term debt from the Water Infrastructure Finance Authority of Arizona (“WIFA”) in an amount not to exceed \$150,000 for Arsenic Treatment Equipment for Ash Fork Well No. 2 (“Financing Application”). The Arizona Corporation Commission Utilities Division Staff (“Staff” or “Utilities Staff”) engineering review and analysis of both applications is presented in this report.

Ash Fork is located approximately 20 miles west of Williams on Interstate 40 in Yavapai County, Arizona. Figure A-1 shows the location of Ash Fork within Yavapai County and Figure A-2 shows the certificated area.

B. DESCRIPTION OF WATER SYSTEM

Ash Fork’s Certificate of Convenience and Necessity includes an area totaling approximately 1.5 square miles. As of December 31, 2014, there were 466 water customers including 223 metered customers, and 243 standpipe customers. The water system was field inspected on November 17, 2015, by Jian W. Liu, Staff Utilities Engineer, in the accompaniment of Lewis Hume, Operator and Manager for the Company.

The Ash Fork water system consists of two wells, two water storage tanks with a total storage capacity of 1,000,000 gallons, and a distribution system. Detailed plant facility descriptions follow:

Table 1 Well Data

Well Number	ADWR ID No.	Pump HP	Pump GPM	Casing Size(in) & Depth(ft)	Meter Size(in)	Year Drilled
1	55-604624	60	155	12 and 1700	4	1975
2	55-590950	60	130	12-9.5 and 1302	6	2002
Total			285			

Note: GPM = gallons per minute.

Table 2 Storage Tanks

Capacity (Gallons)	Quantity (Each)	Location
500,000	2	Near HWY 89
Total: 1,000,000		

Table 3 Water Mains

Diameter (inch)	Material	Length (ft)
2	PVC	1,790
2	Steel	8,281
4	PVC	11,296
6	PVC	15,000
8	PVC	719
8	Ductile/PVC	350/1,614

Table 4 Customer Meters

Size	Quantity
5/8 x 3/4-inch	213
3/4-inch	
1- inch	12
1-1/2-inch	
2-inch	16
Turbo 3	2
Turbo 4	
Turbo 6	
Total	243

Table 5 Fire Hydrants

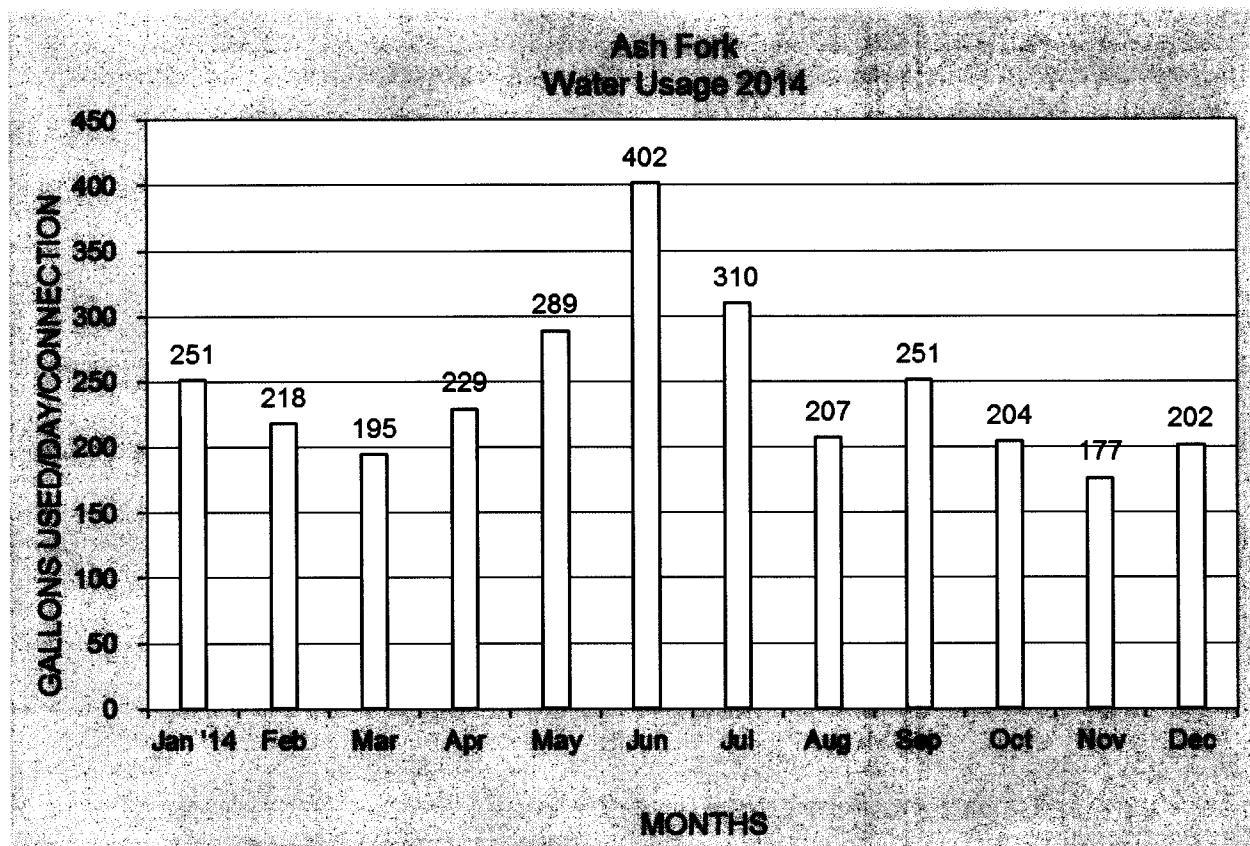
Size	Quantity
Standard	4
Other	

C. WATER USE

Water Sold

Based on the information provided by Ash Fork, water use for the test year is presented in Figure C-1. Customer consumption experienced a high monthly average water use of 402 gallons per day (“GPD”) per customer and a low monthly average water use of 177 GPD per connection for an average annual use of 245 GPD per connection.

Figure C-1. Water Use



Non-Account Water

Non-account water should be 10 percent or less. The Company reported that the water pumped in 2014 was 34.405 million gallons (“MG”), and water sold was 33.362 MG. Therefore, the Company’s water loss during the test year was approximately 3.03 percent.

D. GROWTH

The Company reported 502 customers in 2007. Ash Fork's water system had 466 customers in December 2014. The Company anticipates little or no growth in the next 3 to 5 years.

Water System Analysis

The existing water system has adequate well production and storage capacity to serve the existing connections and reasonable growth.

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

Compliance

ADEQ reported that the Ash Fork drinking water system, Public Water System ("PWS") No. 13-008, is currently delivering water that meets water quality standards required by 40 C.F.R. 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code ("A.A.C."), Title 18, Chapter 4. (ADEQ compliance status report dated October 26, 2015).

Water Testing Expense

The Company is subject to mandatory participation in the Monitoring Assistance Program ("MAP"). Participation in the MAP program is mandatory for water systems which serve less than 10,000 persons (approximately 3,300 service connections).

The Company reported its water testing expense at \$2,657 during the test year. Table A shows Staff's annual monitoring expense estimated at \$2,543 with participation in the MAP. Staff recommends an average annual cost of \$2,543 be adopted for the water testing expense in this proceeding.

Table A Water Testing Expense

Monitoring PWS#13-008 for 2 wells (Tests per 3 years, unless noted.)	Cost per test	No. of tests per 3 years	Total 3 year cost	Annual Cost
Total Coliform – monthly	\$ 20	72	1440	\$480
Inorganics (& secondary)	\$240	2	\$480	\$160
Radiochemical – (1/ 4 yrs)	MAP			MAP
IOC's, SOC's, VOC's				MAP
Nitrates – annual	\$40	6	\$240	\$80

Nitrites	MAP			MAP
Asbestos – per 9 years	MAP			MAP
Lead & Copper – annual	\$50	60	\$3,000	\$1,000
MAP fees (annual)				\$823
Total				\$2,543

F. ARIZONA DEPARTMENT OF WATER RESOURCES (“ADWR”) COMPLIANCE

The Company is not located in an Active Management Area (“AMA”) and is not subject to any AMA reporting and conservation requirements. ADWR reported that Ash Fork is currently in compliance with departmental requirements governing water providers and/or community water systems. (ADWR compliance status report dated December 4, 2015)

G. ACC COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items for the Company. (Compliance Section email dated October 8, 2015)

H. DEPRECIATION RATES

In the prior rate case, the Company adopted Staff’s typical and customary water depreciation rates. These rates are presented in Table H-1 and it is recommended that the Company continue to use these depreciation rates by individual NARUC category.

I. CURTAILMENT PLAN TARIFF

The Company has an approved curtailment tariff on file with the Commission.

J. BACKFLOW PREVENTION TARIFF

The Company has an approved backflow prevention tariff on file with the Commission.

K. BEST MANAGEMENT PRACTICES (“BMPS”)

Staff recommends that Ash Fork be required to file with Docket Control, as a compliance item in this docket, within 90 days of the effective date of the Commission’s Decision in this matter, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff and available at the Commission’s website. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

L. SERVICE LINE AND METER INSTALLATION CHARGES

The Company has proposed changes to its service line and meter installation charges. These charges are refundable advances and the Company's proposed charges are within or below Staff's recommended range for these charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff. Staff recommends that the Company charge separate service line and meter installation charges. The separate service line charges and meter charges recommended by Staff and listed in Table L-1 equal the Company's total proposed charge.

Table L-1. Service Line and Meter Installation Charges

Meter Sizes	Current Total Charges	Company Proposed Total Charges	Staff recommended Service Line Charges	Staff recommended * Meter Charges	Staff recommended Total Charges
5/8" x 3/4"	350	380	290	90	380
3/4"	350	380	290	90	380
1"	420	450	310	140	450
1-1/2"	900	950	500	450	950
2"	1,340	1,400	660	740	1,400
3"	2,100	2,200	900	1,300	2,200
4"	2,800	3,000	1,200	1,800	3,000
6"	3,600	3,750	1,250	2,500	3,750

*Note: Meter charge includes meter box or vault.

M. FINANCING APPLICATION

On September 30, 2015, Ash Fork filed an application with Commission requesting authorization to incur long term debt from the WIFA of Arizona in an amount not to exceed \$150,000 for Arsenic Treatment Equipment for Ash Fork Well No. 2.

As discussed in the ADEQ compliance Section above, on October 26, 2015 ADEQ reported that the Ash Fork drinking water system is currently delivering water that meets water quality standards. The arsenic level at Well No. 2 has decreased from 11.1 parts-per-billion ("ppb") in 2014 to 10.1 ppb in 2015 based on annual average. The Maximum Contaminant Level ("MCL") for arsenic is 10.0 ppb.

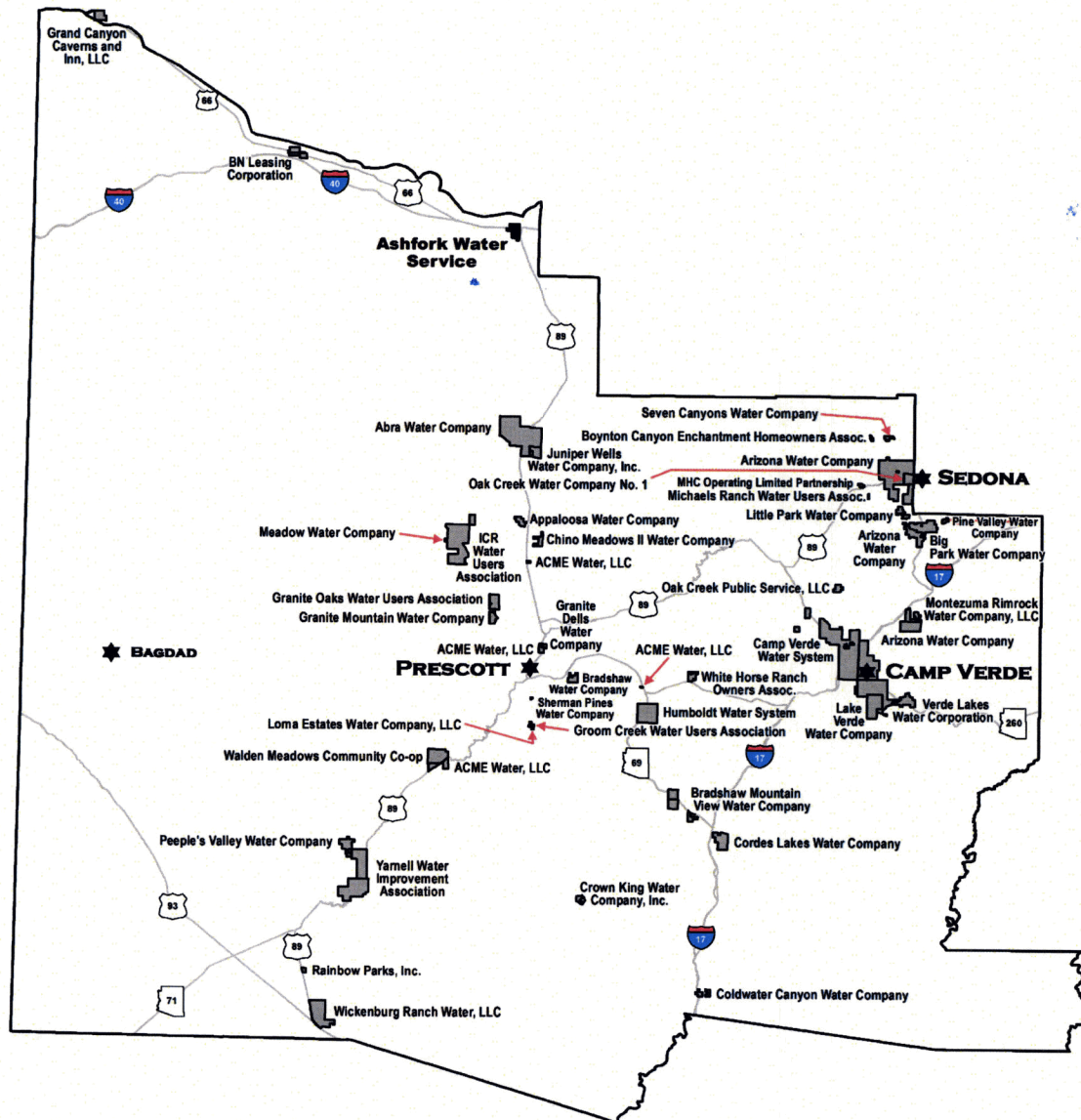
Table M-1

Arsenic Test Results			
Date	mg/L	ppb	RAA (ppb)*
9/24/2013	0.010	10.0	
11/21/2013	0.012	12.0	
3/14/2014	0.0106	10.6	
6/24/2014	0.0121	12.1	
9/22/2014	0.0107	10.7	
12/9/2014	0.011	11.0	11.1
3/24/2015	0.0092	9.2	10.75
6/22/2015	0.0103	10.3	10.03
9/1/2015	0.0100	10.0	10.1

*RAA: Running Annual Average

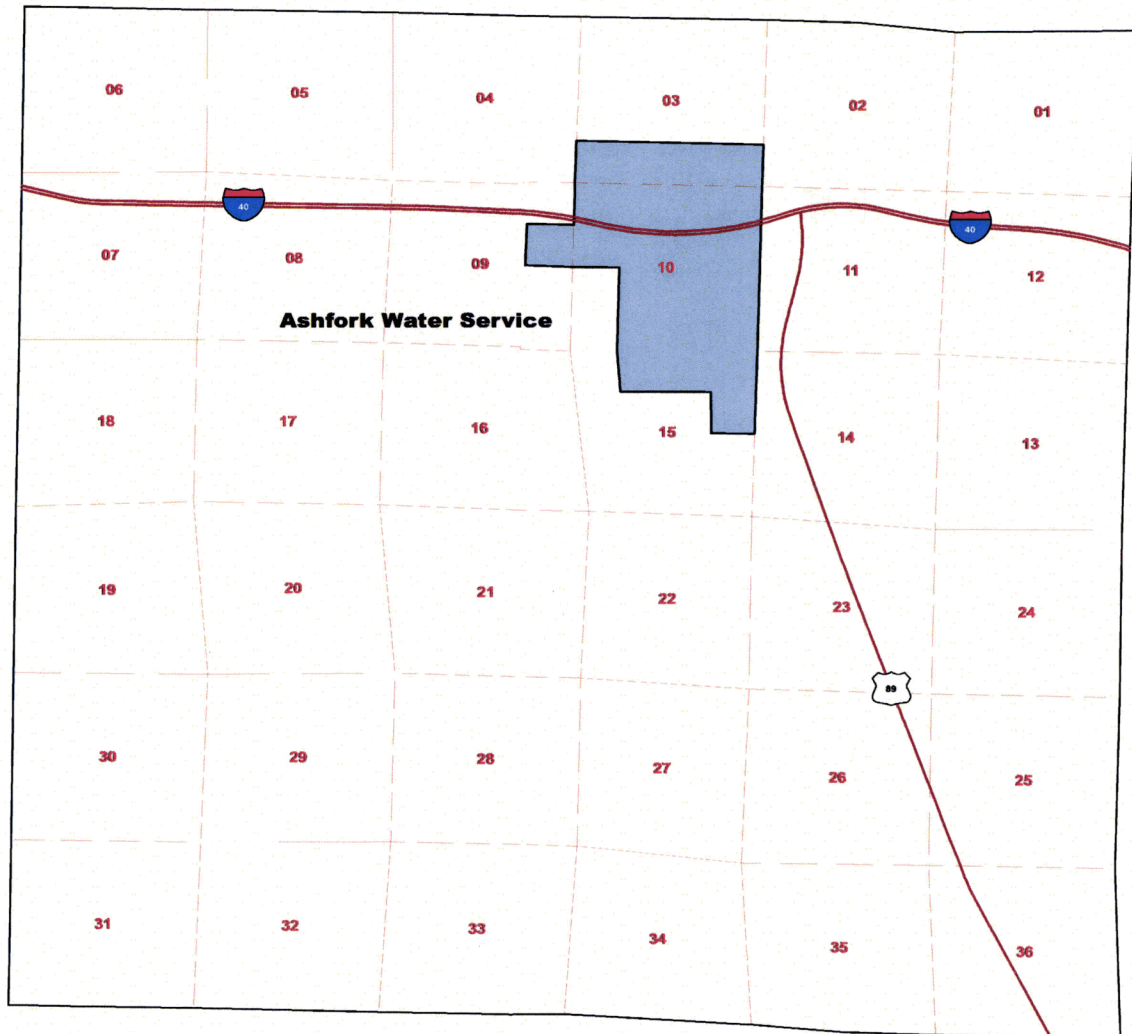
In light of declining arsenic measurements, Staff believes the Company should monitor the situation for one more year, prior to installing Arsenic Treatment Equipment ("ATE"). If arsenic exceeds 10 ppb after one year, Staff concludes that the Company's proposal to install ATE to treat Well No. 2 water is appropriate and its cost estimates reasonable. The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on ATE.

YAVAPAI COUNTY



A-1. County Map

Y A V A P A I C O U N T Y



A-2. Certificated Area

Table H-1. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	10	10.00

ORIGINAL



MEMORANDUM

TO: Docket Control

FROM: Thomas M. Broderick
Director
Utilities Division

RECEIVED
AZ CORP COMMISSION
DOCKET CONTROL

2016 JAN 11 PM 4 11

DATE: January 11, 2016

RE: STAFF REPORT FOR ASH FORK DEVELOPMENT ASSOCIATION, INC.
DBA ASH FORK WATER SERVICE'S APPLICATION FOR A PERMANENT
RATE INCREASE AND FINANCING APPROVAL. (DOCKET NOS. W-
01004B-15-0313 AND W-01004B-15-0342)

Attached is the Staff Report for Ash Fork Development Association, Inc. dba Ash Fork Water Service's application for an increase in its rates and to incur long-term debt. Staff recommends approval of the rate application using Staff's recommended rates and charges. Staff recommends approval of the requested financing and the associated surcharge mechanism with conditions.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before January 21, 2016.

TMB:PNT:nr/WVC

Originator: Phan Tsan

Arizona Corporation Commission

DOCKETED

JAN 11 2016

DOCKETED BY	<i>KE</i>
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Service List for: Ash Fork Development, Inc. dba Ash Fork Water Service
Docket Nos. W-01004B-15-0313 & W-01004B-15-0342

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Ash Fork Development, Inc. dba Ash Fork Water Service
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1200 West Washington Street
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**STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION**

**ASH FORK DEVELOPMENT ASSOCIATION, INC. DBA
ASH FORK WATER SERVICE
DOCKET NOS. W-01004B-15-0313
AND W-01004B-15-0342**

**APPLICATION FOR A
PERMANENT RATE INCREASE
AND FINANCING APPROVAL**

JANUARY 11, 2016

STAFF ACKNOWLEDGMENT

The Staff Report for Ash Fork Development Association, Inc., dba Ash Fork Water Service, Docket Nos. W-01004B-15-0313 and W-01004B-15-0342, was the responsibility of the Staff members listed below. Phan Tsan was responsible for the financial review and analysis of the Company's application, rate base, revenue requirement, and rate design. Jian Liu was responsible for the engineering and technical analysis. Deb Reagan was responsible for reviewing the Commission's records on customer complaints filed with the Commission.



Phan Tsan
Public Utilities Analyst



Jian Liu
Utilities Engineer



Deb Reagan
Public Utilities Consumer Analyst

EXECUTIVE SUMMARY
ASH FORK DEVELOPMENT ASSOCIATION, INC. DBA
ASH FORK WATER SERVICE
DOCKET NOS. W-01004B-15-0313 & W-01004B-15-0342

Ash Fork Development Association, Inc., dba Ash Fork Water Service ("Ash Fork" or "Company") is a Class D water utility located 50 miles west of Flagstaff in Yavapai County, Arizona. Ash Fork provides potable water service to approximately 243 metered customers in its certificated area. Ash Fork's current rates were approved in Decision No. 71181, dated June 30, 2009.

On September 1, 2015, the Company filed an application for a permanent rate increase. Subsequently, on September 30, 2015, the Company also filed an application for financing approval.

The Company proposed a base rate increase \$35,295 or 12.69 percent increase over the test year revenue of \$278,069 to \$313,364. The Company proposed revenue would result in an operating income of \$20,874 for a 5.37 percent rate of return and an operating margin of 6.66 percent. The Company has proposed an original cost rate base ("OCRB") of \$388,740. The Company's proposed rates would increase the typical 5/8 x 3/4-inch meter residential bill, with a median usage of 2,951 gallons, from \$21.89 to \$24.18; an increase of \$2.29 or 10.46 percent. The Company's proposed rates actually produce operating revenue of \$336,786 based on Staff's bill analysis, which is \$23,422 more than its proposed revenue requirement for operating revenue.

Staff recommends a \$12,469 or 4.39 percent increase of the Staff adjusted test year revenue of \$284,270 to \$296,739. Staff's recommended revenue would result in an operating income of \$37,193 for a 7.93 percent rate of return and operating margin of 12.53 percent. Staff recommended an OCRB of \$468,857. Staff's recommended rates would increase the typical 5/8 x 3/4-inch meter residential bill, with a median usage of 2,951 gallons from \$21.89 to \$22.23, an increase of \$0.34 or 1.55 percent, without the loan surcharge.

The Company's financing application seeks authorization to incur long term debt from the Water Infrastructure Finance Authority of Arizona ("WIFA") in an amount not to exceed \$150,000 for Arsenic Treatment Equipment for Ash Fork Well No. 2. The Company did not include a request for a WIFA loan surcharge.

With regards to the WIFA Loan, Staff is recommending a WIFA loan surcharge that would generate estimated revenue of \$14,555, for a total revenue of approximately \$311,294 as shown on schedule PNT-1 and PNT-8. Once the WIFA loan surcharge is implemented, the typical 5/8 x 3/4-inch meter residential bill of \$22.23, inclusive of Staff's recommended base rate increase, would further increase by the amount of the surcharge \$3.02 to \$25.25.

Staff recommends

- Approval of the Staff recommended rates and charges as shown on Schedule PNT-4.
- That the Company file with Docket Control, as a compliance item in this Docket, a schedule of its approved rates and charges within 30 days after the Decision in this matter is issued.

- That the Company continue to use the depreciation rates by individual National Association of Regulatory Utility Commissioners ("NARUC") category presented in Table H-1 of the attached Engineering Report.
- Approval of the Company's application for authorization to issue long-term debt to WIFA in an amount not to exceed \$150,000 with one condition:
 - The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on Arsenic Treatment Equipment ("ATE").
- Approval of the associated surcharge mechanism that may result in a monthly surcharge up to the amount per customer as follows:

Meter Size	Monthly Surcharge
5/8" x 3/4" Meter	\$3.02
3/4" Meter	\$4.54
1" Meter	\$7.56
1½" Meter	\$15.12
2" Meter	\$24.20
3" Meter	\$45.37
4" Meter	\$75.62
6" Meter	\$151.24

- That the actual amount of the WIFA loan surcharge be calculated based upon the actual terms of the WIFA loan and actual number of customers at the time of loan closing.
- The Company file as a compliance item in this Docket, within 30 days of the execution of any financing transaction authorization herein, a notice confirming that such execution has occurred and a certification by an authorized Company representative that the terms of the financing fully comply with the authorizations granted.
- The Company provide to Staff, upon request, a copy of any loan documents executed pursuant to the authorizations granted herein.
- Upon filing of the loan closing notice, the Company may file in this Docket an application requesting implementation of the associated surcharge.
- Within 30 days of the filing of a surcharge implementation request, Staff shall calculate the appropriate WIFA surcharge and prepare and file a recommended order for expedited Commission consideration and approval.
- Approval of the loan and surcharge be rescinded if the Company has not started drawing funds from the loan within four years of the date of the Decision resulting from this proceeding.

- Upon approval of the WIFA surcharge, the Company shall open a separate interest-bearing account in which all surcharge monies collected from customers will be deposited.
- The only disbursement of funds from this account will be to make debt service, arsenic treatment related maintenance, and WIFA reserve payments to WIFA.
- That the Company be directed to record the customer-provided WIFA reserve funding in NARUC Account No. 253, "Other Deferred Credits" as soon as it begins collecting revenue from the surcharge. That the deferred credit be clearly noted as "Customer Provided Funding for WIFA Reserve Fund" on the Company's books and records, and that the net balance in this account continue to be shown as a regulatory liability until the balance is fully amortized or otherwise credited back to ratepayers.
- That the deferred credit balance related to the WIFA reserve payment be recognized as a reduction to the Company's rate base in future rate change filings and that the deferred credit balance will only be used to reduce the rate base to the extent that it does not result in a negative rate base amount.
- That the amortization of the deferred credit begin once the plant is placed in service, that the deferred credit be amortized for five years, and that the amortization expense be used to offset depreciation expense.
- That the Company, as a compliance item in this case, notify its customers of the authorized rates and charges approved in this proceeding, and their effective date, in a form acceptable to Staff, by means of an insert in its next regular scheduled billing and to file copies with Docket Control within 30 days of the date notice is sent to customers.

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ATTACHMENTS

Engineering Report.....	Attachment A
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FACT SHEET

Type of Ownership: Arizona non-profit "C" Corporation

Location: In Yavapai County about 50 miles west of Flagstaff, Arizona.

Rates: Permanent rate increase application filed September 1, 2015. The application became sufficient on October 27, 2015.

Current Rates: Decision No. 71181, dated June 30, 2009.

Current Test Year Ended: December 31, 2014.

Based on Residential 5/8 x 3/4-inch meter	Company Current <u>Rates</u>	Company Proposed <u>Rates</u>	Staff Recommended <u>Rates</u>
Monthly Minimum Charge	\$12.00	\$13.50	\$12.20
Gallons in minimum	0	0	0
Per 1,000 gallons			
Tier One from 1 gallon to 3,000 gallons	\$3.35	\$3.62	\$3.40
Tier Two from 3,001 gallons to 6,000 gallons	\$4.00	\$4.32	\$4.20
Tier Three all gallons over 6,000	\$4.66	\$5.03	\$5.00
Typical residential bill (Based on median usage of 2,951 gallons)	\$21.89	\$24.18	\$22.23

Customers:

Number of metered customers in the current test year	243
Number of permanent standpipe accounts in the current test year	246

Current test year customers by meter size:

5/8 x 3/4-inch	213
1-inch	12
1-1/2 inch	0
2-inch	16
3-inch	2
Coin operated 2-inch	N/A
Coin operated Filter Machine	N/A
Card operated Standpipe	246

Complaints:

A review of Consumer Service records reveals the following complaints and/or opinions filed from January 1, 2012 through November 24, 2015.

2015 – Zero Complaints

One Opinion – Opposed to the proposed rate increase

2014 – 2012 - Zero Complaints

Notifications:

Company mailed an Amended Customer Notification on October 1, 2015. The Affidavit of Mailing was docketed on October 8, 2015.

SUMMARY OF RATE FILING

On September 1, 2015, the Company filed an application for a permanent rate increase. Subsequently, on September 30, 2015, the Company also filed an application for financing approval. On October 27, 2015, the rate application was deemed sufficient by Staff.

The test year results as adjusted by Staff for Ash Fork show total operating revenue of \$284,270, an operating income of \$24,957, for 5.32 rate of return, as shown on Schedule PNT-1. The original cost rate base ("OCRB") as adjusted by Staff is \$468,857.

The Company proposed a \$35,295 or 12.69 percent increase over the test year revenue of \$278,069 to \$313,364. The Company proposed revenue would result in an operating income of \$20,874 for a 5.37 percent rate of return and an operating margin of 6.66 percent. The Company has proposed an OCRB of \$388,740. The Company's proposed rates would increase the typical 5/8 x 3/4-inch meter residential bill, with a median usage of 2,951 gallons, from \$21.89 to \$24.18; an increase of \$2.29 or 10.46 percent. The Company's proposed rates actually produce operating revenue of \$336,786 based on Staff's bill analysis, which is \$23,422 more than its proposed revenue requirement for operating revenue.

Staff recommends a \$12,469 or 4.39 percent increase over the Staff adjusted test year revenue of \$284,270 to \$296,739. Staff's recommended revenue would result in an operating income of \$37,193 for a 7.93 percent rate of return and an operating margin of 12.53 percent. Staff recommended an OCRB of \$468,857. In addition, Staff is recommending a WIFA loan surcharge that would generate estimated revenue of \$14,555, for total revenue of approximately \$311,294 as shown on schedule PNT-1 and PNT-8. Staff's recommended rates would increase the typical 5/8 x 3/4-inch meter residential bill, with a median usage of 2,951 gallons from \$21.89 to \$22.23, an increase of \$0.34 or 1.55 percent, without a loan surcharge. Once the WIFA loan surcharge is implemented, the typical 5/8 x 3/4-inch meter residential bill of \$22.23 would increase by the amount of the surcharge, \$3.02, to \$25.25. Staff's recommended rates with surcharge would increase the typical bill with a median usage of 2,951 gallons from \$22.23 to \$25.25, an increase of \$3.02, or 13.59 percent as shown on Schedule PNT-5.

BACKGROUND

Ash Fork is an Arizona class D utility engaged in the business of providing potable water service. Ash Fork is a non-profit corporation not subject to the payment of Federal or State of Arizona income taxes. Ash Fork was granted a Certificate of Convenience and Necessity ("CC&N") to provide water service per Decision No. 43321, effective May 23, 1973.

CONSUMER SERVICES

A review of the Consumer Services Section database for the Company from 2012 through 2014, revealed that there were no complaints, inquiries or opinions. In 2015, there were no complaints or inquiries and the one opinion was to oppose the rate increase.

COMPLIANCE

The Company has filed its Annual Reports and is in Good Standing with the Utilities Division and the Corporations Division of the Commission as of the date of this report.

A check of the Utilities Compliance Database indicates that there are no delinquencies for Ash Fork at this time. Therefore, Ash Fork is currently "in Compliance" with the Utilities Compliance Database.

ENGINEERING ANALYSIS

The water system was visited on November 17, 2015, by Mr. Jian Liu, Staff Utilities Engineer, in the accompaniment of Mr. Lewis Hume of the Company. A complete discussion of Staff's technical findings and recommendations along with a complete description of the Company's water system is provided in the attached Engineering Report.

RATE BASE

Staff's adjustments increased the Company's proposed rate base by \$80,117 from \$388,740 to \$468,857, as shown on Schedule PNT-2, page 1. Details of Staff's adjustments are discussed below.

Plant in Service

Adjustment "A" decreases plant in service by \$37,249 from \$2,206,566 to \$2,169,317, as shown on Schedule PNT-2, pages 1 and 2. During the course of the audit, Staff found that the invoices provided with the application did not match the level of plant additions reflected in the schedules contained in the application. Staff believes that third party generated invoices are the best reflection of actual cost; therefore, Staff made adjustments to plant additions to conform to actual invoices provided by the Company. Adjustment A consists of the following:

Electric Pumping Equipment- Adjustment "a" increases Electric Pumping Equipment account by \$20,922, from \$277,413 to \$298,335 as shown on Schedule PNT 2, page 2. Staff's adjusted amount reflects the \$277,413 balance established by Decision No. 71181 and \$20,922 increase in Electric Pumping Equipment to conform to supporting documentation.

As noted, Staff believes that the level of costs included on third party generated invoices should be used when quantifying additional plant captured in the Company's rate base.

Water Treatment Plant- Adjustment "b" decreases Water Treatment Plant account by \$7,015, from \$71,152 to \$64,137 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$64,137 balance established by Decision No. 71181 and removal of \$7,015 in Water Treatment Plant to conform to supporting documentation.

Distribution Reservoirs & Standpipes- Storage Tank- Adjustment "c" decreases Distribution Reservoirs & Standpipes account by \$2,412, from \$110,192 to \$107,780 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$107,780 balance established by Decision No. 71181 and removal of \$2,412 in Distribution Reservoirs & Standpipes to conform to supporting documentation.

Transmission & Distribution Mains- Adjustment "d" increases Transmission & Distribution Mains account by \$8,179, from \$782,343 to \$790,522 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$782,343 balance established by Decision No. 71181 and increasing by \$8,179 in Transmission & Distribution Mains to conform to supporting documentation.

Services - Adjustment "e" increases Services account by \$4,598, from \$7,434 to \$12,032 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$7,434 balance established by Decision No. 71181 and increasing by \$4,598 in Services to conform to supporting documentation.

Meters & Meter Installations - Adjustment "f" increases Meters & Meter Installations account by \$3,335, from \$21,864 to \$25,199 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$18,200 balance established by Decision No. 71181 and increasing by \$6,999 in Meters & Meter Installations to conform to supporting documentation.

Hydrants - Adjustment "g" decreases Hydrants account by \$2,953, from \$9,048 to \$6,095 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$6,095 balance established by Decision No. 71181 and removal of \$2,953 in Hydrants to conform to supporting documentation.

Other Plant and Miscellaneous Equipment - Adjustment "h" decreases Other Plant and Miscellaneous Equipment account by \$48,837, from \$55,346 to \$6,509 as shown on Schedule PNT-2 page 2. Staff's adjusted amount reflects the \$0 balance established in Decision No. 71181 and removal of \$48,837 in Other Plant and Miscellaneous Equipment to conform to supporting documentation.

Office Furniture & Fixtures - Adjustment "i" decreases Office Furniture & Fixtures account by \$15,435, from \$39,574 to \$24,139 as shown on Schedule PNT-2 page 2. Staff's adjusted amount reflects the \$26,023 balance established in Decision No. 71181, retirement of \$1,884, and removal of \$15,435 in Office Furniture & Fixtures to conform to supporting documentation.

Computer & Software- Adjustment "j" increases Computer & Software account by \$589, from \$0 to \$589 as shown on Schedule PNT 2, Page 2. Staff's adjusted amount reflects the \$0 balance established by Decision No. 71181 and increasing by \$589 in Computer & Software to conform to supporting documentation.

Tools & Work Equipment – Adjustment “k” increases Tools & Work Equipment account by \$1,780, from \$24,337 to \$26,117 as shown on Schedule PNT-2, page 2. Staff’s adjusted amount reflects the \$23,555 balance established in Decision No. 71181 and \$2,562 plant additions to conform to supporting documentation.

Other Rate Base Items

Accumulated Depreciation

Adjustment “B” increases accumulated depreciation by \$81,420 from \$1,345,666 to \$1,427,086, as shown on Schedule PNT-2, pages 1 and 3. Staff’s adjusted amount reflects the \$847,877 balance established in Decision No. 71181 and Staff adjustments made to plant in service account balances.

Contribution In Aid of Construction (“CIAC”)

Adjustment “C” increases CIAC by \$87,988 from \$454,982 to \$542,970, and Amortization of CIAC by \$263,965, from \$0 to \$263,965 as shown on Schedule PNT-2, pages 1 and 4. Staff’s adjusted amounts reflect \$542,970 CIAC and \$87,988 Amortization of CIAC balance established in Decision No. 71181. Adjustments to Amortization of CIAC also reflect Staff’s calculation based on the composite depreciation rate of 4.63 percent established in Decision No. 71181.

Working Capital

Adjustment “D” increases Working Capital by \$22,810 from \$0 to \$22,810 as shown on schedule PNT-2, pages 1 and 4. This adjustment reflect Staff’s calculation of cash working capital based on Staff’s recommendations for Purchased Power and Operation and Maintenance expense. Staff used the formula method for this determination.

OPERATING INCOME STATEMENT

Operating Revenue

Staff’s adjustment to operating revenue resulted in an increase of \$6,201 from \$278,069 to \$284,270 as shown on Schedule PNT-3, pages 1 and 2.

Adjustment “1” reflects adjusted gross metered water revenue to include Revenue from services provided to Community Buildings owned by the Company that were not charged for the services used.

Adjustment “2” reflects adjusted Other Water Revenues to include late payments charges and retail sales.

Operating Expenses

Staff’s adjustments to operating expenses resulted in a net decrease of \$33,177, from \$292,490 to \$259,313, as shown on Schedule PNT-3, page 1. Details of Staff’s adjustments are presented below.

Depreciation Expense – Adjustment “3” decreases depreciation expense by \$20,705, from \$57,011 to \$36,306, as shown on Schedule PNT-3, pages 1, 2, and 3. Staff’s depreciation expense reflects application of Staff’s recommended depreciation rates to Staff’s recommended plant balances.

Taxes-Other than Income – Adjustment “4” decreases this account by \$12,247, from \$12,247 to \$0 as shown on Schedule PNT-3, page 1 and 2. This adjustment reflects the removal of sale taxes. It is not appropriate to include sale taxes in Operating Expenses since they were paid by Customers and not included in Revenue.

Property Tax Expense – Adjustment “5” decreases property tax expense by \$225, from \$16,118 to \$15,893 as shown on Schedule PNT-3, pages 1, 2 and 4. Staff calculated its property tax amount using a modified version of the Arizona Department of Revenue’s property tax method.

REVENUE REQUIREMENT

Staff recommends total base rates revenue of \$296,739, as shown on Schedule PNT-1. Staff’s recommendation is an increase of \$12,469 or 4.39 percent over Staff’s adjusted test year revenue of \$284,270. Staff’s recommended base rates revenue increase would produce an operating income of \$37,193 for a 12.53 percent operating margin. Staff’s recommended OCRB is \$468,857. Staff’s recommended rates and surcharges yield a cash flow of \$40,000 after payment of the debt service on current debt and the \$150,000 proposed loan, as shown on Schedule PNT-1 and PNT-8.

Staff’s total revenue requirement of \$311,294, including estimated surcharges, provides the Company with sufficient cash flow to pay operating expenses, contingencies, principal and interest on its current debt and proposed \$150,000 loan, and to meet the minimum 1.2 debt service coverage (“DSC”) ratio required by WIFA. Cash flow needs and DSC requirements determined the revenue requirement.

RATE DESIGN

Schedule PNT-4, pages 1 and 2 presents a complete list of the Company’s present, proposed, and Staff’s recommended rates and charges.

The Company proposed a rate structure that includes a monthly minimum charge that increases by meter size and an inverted three-tier commodity rates for all residential meter sizes with break-over points at 3,000 gallons and 6,000 gallons for all residential meter sizes, and an inverted two-tier commodity rate for all commercial meter sizes with break-over points at 6,000 gallons for all commercial meter sizes. The Company also proposed residential monthly minimum charges different than commercial monthly minimum charges. The Company’s proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 2,951 gallons from \$21.89 to \$24.18, for an increase of \$2.29, or 10.46 percent.

Staff recommended a rate structure that includes a monthly minimum charge that increases by meter size and inverted three-tier commodity rates for 5/8x 3/4 inch and 3/4 inch residential meters, and two-tier commodity rates for larger residential meters and all commercial meters. Staff recommends break-over points that increase by meter size. Staff also recommends residential or commercial customers that have the same meter sizes be charged the same monthly minimum rate.

Staff's recommended rates (excluding the WIFA loan surcharge) would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 2,951 gallons from \$21.89 to \$22.23, for an increase of \$0.34, or 1.55 percent. Once the WIFA loan surcharge is implemented, the typical 5/8 x 3/4-inch meter residential bill of \$22.23 would increase by the amount of the surcharge, \$3.02, to \$25.25. Staff recommended rates with surcharge would increase the typical bill with a median usage of 2,951 gallons from \$22.23 to \$25.25, an increase of \$3.02, or 13.59 percent.

MISCELLANEOUS SERVICE CHARGES

After Hours Service Charge – The Company proposed to increase After Hours Service Charge from \$9 to \$10. Staff recommended an increase from \$9 to \$30.

Meter Test (If correct) - The Company did not propose any change to its current Meter Test (If Correct) charge. Staff recommended a \$10 decrease to Meter Test (If Correct) charge, from \$40 to \$30.

SERVICE LINE AND METER INSTALLATION CHARGES

The Company proposed changes to its current service line and meter installation charges. Staff concurs with the Company's proposed service charges as shown on Schedule PNT-4, page 2.

FINANCING APPLICATION AND SURCHARGE MECHANISM

Purpose of the Requested Financing

The purpose of the application is to provide financing for Ash Fork to purchase new Arsenic Treatment Equipment for Well No. 2. The estimated cost is \$150,000.

Engineering Analysis

On October 26, 2015, ADEQ reported that the Ash Fork drinking water system is currently delivering water that meets water quality standards.

In light of declining arsenic measurements, Staff believes the Company should monitor the situation for one more year, prior to installing Arsenic Treatment Equipment ("ATE"). If arsenic exceeds 10 ppb after one year, Staff concludes that the Company's proposal to install ATE to treat Well No. 2 water is appropriate and its cost estimates reasonable. The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on ATE. A complete discussion of Staff's findings and recommendations concerning the financing application can be found in the attached Engineering Memorandum.

Financial Analysis

The proposed \$150,000 financing is a 20-year amortizing loan with an anticipated 5.25 percent interest rate. The payments are estimated to be \$1,010.77 per month, or \$12,129.20 annually, as shown on schedule PNT-7, page 2. Because the final details of the WIFA loan will not be known until after

the loan is closed, Staff is recommending a surcharge mechanism be approved but for a final determination of the amount for a filing due after closure of the loan.

Surcharge Mechanism

Schedule PNT-7 presents a calculation of the additional annual revenue needed by the Company to service a \$150,000 loan over 20 years at 5.25 percent interest rate for the loan. Based on Staff's calculation, \$150,000 of WIFA debt will require the Company to generate an annual cash flow of \$14,555 through the surcharge. Staff's calculation shows that a residential customer on a 5/8 x 3/4 inch meter will be required to pay a monthly surcharge of \$3.02.

The surcharge mechanism establishes the methodology for calculating the surcharge amount to be applied to the rates established in this rate application. Once the Company has closed on the loan, it would submit an application in this Docket requesting implementation of the surcharge. Staff would then calculate the appropriate surcharge and prepare and file a recommended order for expedited Commission consideration and approval.

WIFA Loan Debt Reserve

Staff has included a provision for the loan reserve fund in the WIFA loan surcharge that customers will pay as shown on Schedule 7. The loan reserve fund is a fund that the Company pays into for five years. After the five years, the balance will equal one year of principal and interest payments for the loan. When the reserve fund is included in the WIFA loan surcharge, as Staff has done, ratepayers will effectively "prepay" \$12,129 in funding that the utility will eventually use either to make loan payments, to pay for future maintenance, or this balance will be refunded to the Company. Ratepayers should be given credit for making these prepayments. Therefore, Staff recommends the following:

1. That the Company be directed to record the customer-provided WIFA reserve funding in NARUC Account No. 253, "Other Deferred Credits" as soon as it begins collecting revenue from the surcharge. That the deferred credit be clearly noted as "Customer Provided Funding for WIFA Reserve Fund" on the Company's books and records, and that the net balance in this account continue to be shown as a regulatory liability until the balance is fully amortized or otherwise credited back to ratepayers.
2. That the deferred credit balance be recognized as a reduction to the Company's rate base in future rate change filings and that the deferred credit balance will only be used to reduce the rate base to the extent that it does not result in a negative rate base amount.
3. That the amortization of the deferred credit begin once the plant is placed in service, that the deferred credit be amortized for five years, and that the amortization expense be used to offset depreciation expense.

Interest and Debt Service Coverage

Staff also examined the effects of the proposed financing on the Company's TIER and DSC.

DSC represents the number of times internally generated cash (i.e., earnings before interest, income tax, depreciation and amortization expenses) covers required principle and interest payments on debt. A DSC greater than 1.0 means operating cash flow is sufficient to cover debt obligations.

TIER represents the number of times earnings before income tax expense covers interest expense on debt. A TIER greater than 1.0 means that operating income is greater than interest expense. A TIER less than 1.0 is not sustainable in the long term but does not necessarily mean that debt obligations cannot be met in the short term.

Under Staff's recommended rates, fully drawing the Staff recommended \$150,000 loan, Ash Fork's after tax TIER and DSC are 2.00 and 2.05, respectively. The pro forma DSC and TIER shows that Ash Fork has adequate cash flow to meet all obligations on the Staff recommended loan and meets the WIFA 1.2 after tax DSC ratio requirement.

Capital Structure

Staff did not calculate Ash Fork's capital structure. However, the Company reported \$2,106,801 total capital includes the following components:

Common Stock Issued	\$477,560
Paid in Capital in Excess of Par Value	\$323,312
Retained Earnings	\$1,874,000
Proprietary Capital (Sole Props and Partnerships)	<u>(\$568,611)</u>
Total Capital	2,106,801

CONCLUSION

In light of declining arsenic measurements, Staff believes the Company should monitor the situation for one more year, prior to installing ATE. If arsenic exceeds 10 ppb after one year, Staff concludes that the Company's proposal to install ATE to treat Well No. 2 water is appropriate and its estimated cost of \$150,000 is reasonable.

Staff concludes that Ash Fork would have adequate cash flow to meet all obligations on the proposed \$150,000 debt.

Staff concludes that the proposed financing is for lawful purposes, within Ash Fork's powers as a corporation, compatible with the public interest, consistent with sound financial practices and will not impair its ability to provide public service.

Staff recommends approval of the Company's application for authorization to issue long-term debt to WIFA in amount not to exceed \$150,000 with the condition:

- The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on ATE.

STAFF RECOMMENDATIONS

Staff recommends:

- Approval of the Staff recommended rates and charges as shown on Schedule PNT-4.
- That the Company file with Docket Control, as a compliance item in this Docket, a schedule of its approved rates and charges within 30 days after the Decision in this matter is issued.
- That Ash Fork continue to use these depreciation rates by individual National Association of Regulatory Utility Commissioners category presented in Table H-1 of the attached Engineering Report.
- Approval of the Company's application for authorization to issue long-term debt to WIFA in amount not to exceed \$150,000 with one condition:
 - The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on ATE.
- Approval of the associated surcharge mechanism that may result in a monthly surcharge up to the amount per customer as follows:

Meter Size	Monthly Surcharge
5/8"x 3/4" Meter	\$3.02
3/4" Meter	\$4.54
1" Meter	\$7.56
1½" Meter	\$15.12
2" Meter	\$24.20
3" Meter	\$45.37
4" Meter	\$75.62
6" Meter	\$151.24

- That the actual amount of the WIFA loan surcharge be calculated based upon the actual terms of the WIFA loan and actual number of customers at the time of loan closing.
- The Company file as a compliance item in this Docket, within 30 days of the execution of any financing transaction authorization herein, a notice confirming that such execution has occurred and a certification by an authorized Company representative that the terms of the financing fully comply with the authorizations granted.
- The Company provide to Staff, upon request, a copy of any loan documents executed pursuant to the authorizations granted herein.

- Upon filing of the loan closing notice, the Company may file in this Docket an application requesting implementation of the associated surcharge.
- Within 30 days of the filing of a surcharge implementation request, Staff shall calculate the appropriate WIFA surcharge and prepare and file a recommended order for expedited Commission consideration and approval.
- Approval of the loan and surcharge be rescinded if the Company has not started drawing funds from the loan within two years of the date of the Decision resulting from this proceeding.
- Upon approval of the WIFA surcharge, the Company shall open a separate interest-bearing account in which all surcharge monies collected from customers will be deposited.
- The only disbursement of funds from this account will be to make debt service, arsenic treatment related maintenance, and WIFA reserve payments to WIFA.
- That the Company be directed to record the customer-provided WIFA reserve funding in NARUC Account No. 253, "Other Deferred Credits" as soon as it begins collecting revenue from the surcharge. That the deferred credit be clearly noted as "Customer Provided Funding for WIFA Reserve Fund" on the Company's books and records, and that the net balance in this account continue to be shown as a regulatory liability until the balance is fully amortized or otherwise credited back to ratepayers.
- That the deferred credit balance related to the WIFA reserve payment be recognized as a reduction to the Company's rate base in future rate change filings and that the deferred credit balance be used to reduce the rate base only to the extent that it does not result in a negative rate base amount.
- That the amortization of the deferred credit begin once the plant is placed in service, that the deferred credit would be amortized for five years, and that the amortization expense would be used to offset depreciation expense.
- That the Company, as a compliance item in this case, notify its customers of the authorized rates and charges approved in this proceeding, and their effective date, in a form acceptable to Staff, by means of an insert in its next regular scheduled billing and to file copies with Docket Control within 30 days of the date notice is sent to customers.

**SUMMARY OF OPERATING INCOME
ADJUSTED TEST YEAR AND STAFF RECOMMENDED**

	-- Present Rates --		Company Proposed as Filed	Staff Recommended	
	Company as Filed	Staff as Adjusted		Without Surcharge on \$150,000 loan	With Surcharge on \$150,000 loan
Revenues:					
Metered Water Revenue	\$ 275,469	\$ 280,057	\$ 310,764	\$ 292,526	\$ 292,526
Unmetered Water Revenue	2,181	2,181	2,181	2,181	2,181
Other Water Revenues	419	2,032	419	2,032	2,032
Estimated Surcharge Revenue					14,555
Total Operating Revenue	<u>\$ 278,069</u>	<u>\$ 284,270</u>	<u>\$ 313,364</u>	<u>\$ 296,739</u>	<u>\$ 311,294</u>
Operating Expenses:					
Operation and Maintenance	\$ 207,114	\$ 207,114	\$ 207,114	\$ 207,114	\$ 207,114
Depreciation	57,011	36,306	57,011	36,306	36,306
Property & Other Taxes	28,365	15,893	28,365	16,125	16,125
Income Tax	-	-	-		
Total Operating Expense	<u>\$ 292,490</u>	<u>\$ 259,313</u>	<u>\$ 292,490</u>	<u>\$ 259,546</u>	<u>\$ 259,546</u>
Operating Income/(Loss)	<u>\$ (14,421)</u>	<u>\$ 24,957</u>	<u>\$ 20,874</u>	<u>\$ 37,193</u>	<u>\$ 51,748</u>
Rate Base O.C.L.D.	\$ 388,740	\$ 468,857	\$ 388,740	\$ 468,857	\$ 468,857
Rate of Return - O.C.L.D.	-3.71%	5.32%	5.37%	7.93%	11.04%
Operating Margin	N/M	8.78%	6.66%	12.53%	16.62%
Cash Flow (After Debt Service)	\$ 9,090	\$ 27,763	\$ 44,385	\$ 40,000	\$ 40,000

ORIGINAL COST RATE BASE/FAIR VALUE

	----- Original Cost -----			
	Company	Adjustment		Staff
Plant in Service	\$ 2,206,566	\$ (37,249) A	\$	2,169,317
Less:				
Accum. Depreciation	1,345,666	81,420 B		1,427,086
Net Plant	\$ 860,900	\$ (118,669)	\$	742,231
Less:				
Plant Advances	2,100	-		2,100
Service Line and Meter Advances ("Meter Deposit")	15,078	-		15,078
Total Advances	17,178	-		17,178
Contributions Gross	454,982	87,988 C		542,970
Less:				
Amortization of CIAC	-	263,965 C		263,965
Net CIAC	454,982	(175,977)		279,005
Total Deductions	\$ 472,160	\$ (175,977)	\$	296,183
Plus:				
1/24 Power	-	1,540		1,540
1/8 Operation & Maint.	-	21,270		21,270
Inventory	-	-		-
Prepayments	-	-		-
Total Additions	\$ -	\$ 22,810 D	\$	22,810
Rate Base	\$ 388,740	\$ 80,117	\$	468,857

Explanation of Adjustment:

- A See Schedule PNT-2, page 2 of 4 Plant Adjustments
- B See Schedule PNT-2, page 3 of 4 Accumulated Depreciation Adjustments
- C See Schedule PNT-2, page 4 of 4 Staff Rate Base Adjustments
- D Ash Fork did not request a cash working capital allowance. Staff calculated a cash working capital allowance using Staff adjusted operating expenses.

PLANT ADJUSTMENT

	Company Exhibit	Adjustment	Staff Adjusted
301 Organization Costs	\$ -	\$ -	\$ -
302 Franchise Costs	-	-	-
303 Land & Land Rights	55,443	-	55,443
304 Structures & Improvements	86,125	-	86,125
307 Wells & Springs	508,699	-	508,699
311 Electric Pumping Equipment	277,413	20,922 a	298,335
320 Water Treatment Equipment	-	-	-
320.1 Water Treatment Plants	71,152	(7,015) b	64,137
320.2 Solutions & Feeders	-	-	-
320.3 Arsenic Remediation Plant	-	-	-
330 Distribution Reservoirs & Standpipes	-	-	-
330.1 Storage Tank	110,192	(2,412) c	107,780
330.2 Pressure Tanks	-	-	-
331 Transmission & Distribution Mains	782,343	8,179 d	790,522
333 Services	7,434	4,598 e	12,032
334 Meters & Meter Installations	21,864	3,335 f	25,199
335 Hydrants	9,048	(2,953) g	6,095
336 Backflow Prevention Devices	-	-	-
339 Other Plant & Misc. Equip.	55,346	(48,837) h	6,509
340 Office Furniture & Fixtures	39,574	(15,435) i	24,139
340.1 Computer & Software	-	589 j	589
341 Transportation Equipment	35,414	-	35,414
342 Store Equipment	-	-	-
343 Tools & Work Equipment	24,337	1,780 k	26,117
344 Laboratory Equipment	-	-	-
345 Power Operated Equipment	-	-	-
345 Communications Equipment	48,852	-	48,852
347 Miscellaneous Equipment	-	-	-
348 Other Tangibles	73,330	-	73,330
TOTALS	\$ 2,206,566	\$ (37,249) A	\$ 2,169,317

Explanation of Adjustment:

To reflect Decision No. 71181 beginning balance and to conform to supporting documentation

ACCUMULATED DEPRECIATION ADJUSTMENT

	<u>Amount</u>
B- Accumulated Depreciation - Per Company	\$ 1,345,666
Accumulated Depreciation - Per Staff	1,427,086
Total Adjustment	\$ 81,420

To reflect Decision No.71181 balance, Staff adjustments made to plant in service balance, and removal of depreciation accrued on fully depreciated plant.

ACCUMULATED DEPRECIATION			
<u>Description</u>	<u>Company</u> <u>Application</u>	<u>Staff</u> <u>Adjustment</u>	<u>Staff</u> <u>Calculated</u>
Organization Costs			
Franchise Costs			
Land & Land Rights			
Structures & Improvements	44,045	11,490	55,535
Wells & Springs	272,990	55,030	328,020
Electric Pumping Equipment	277,413	9,153	286,566
Water Treatment Equipment	49,745	(8,388)	41,357
Water Treatment Plants		-	
Solutions & Feeders		-	
Arsenic Remediation Plant		-	
Distribution Reservoirs & Standpipes	86,119	(25,045)	61,074
Storage Tank		-	
Pressure Tanks		-	
Transmission & Distribution Mains	405,136	26,793	431,929
Services	2,602	2,939	5,541
Meters & Meter Installations	18,823	1,343	20,166
Hydrants	1,759	1,604	3,363
Backflow Prevention Devices		-	
Other Plant & Misc. Equip.	55,346	(55,106)	240
Office Furniture & Fixtures	23,711	(2,731)	20,980
Computer & Software		589	589
Transportation Equipment	35,414	(4,235)	31,179
Store Equipment		-	
Tools & Work Equipment	23,711	(5,347)	18,364
Laboratory Equipment		-	
Power Operated Equipment		-	
Communications Equipment	48,852	-	48,852
Miscellaneous Equipment		-	
Other Tangibles		73,330	73,330
TOTALS	1,345,666	81,420	1,427,086

STAFF RATE BASE ADJUSTMENTS

C- Contribution in Aid of Construction ("CIAC") - Per Company	\$	454,982	
Per Staff		542,970	\$ 87,988

Amortization of CIAC- Per Company	\$	-	
Per Staff		263,965	\$ 263,965

	CIAC Balance Decision <u>71181</u>	Amortization Decision <u>71181</u>	Composite Depreciation Rate Decision <u>71181</u>
12/31/2007	\$ 542,970	\$ 87,988	4.63%
2008		25,140	
2009		25,140	
2010		25,140	
2011		25,140	
2012		25,140	
2013		25,140	
2014		25,140	
		\$ 263,965	

D- WORKING CAPITAL (1/24 purchased power and 1/8 operation & Maint exp. Portion of cash working capital formula method)- Per company	\$	-	
Per Staff		22,810	\$ 22,810

To reflect Staff's calculation of cash working capital based on Staff's
recommendations for purchased power and operation and maintenance expense

STATEMENT OF TEST YEAR OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted
Revenues:			
461 Metered Water Revenue	\$ 275,469	\$ 4,588 1	\$ 280,057
460 Unmetered Water Revenue	2,181	-	2,181
474 Other Water Revenues	419	1,613 2	2,032
Total Operating Revenue	\$ 278,069	\$ 6,201	\$ 284,270
Operating Expenses:			
601 Salaries and Wages	112,043	-	112,043
610 Purchased Water	-	-	-
615 Purchased Power	36,956	-	36,956
618 Chemicals	-	-	-
620 Repairs and Maintenance	21,667	-	21,667
621 Office Supplies & Expense	1,690	-	1,690
630 Outside Services	6,218	-	6,218
635 Water Testing	2,657	-	2,657
641 Rents	2,607	-	2,607
650 Transportation Expenses	5,007	-	5,007
657 Insurance - General Liability	12,317	-	12,317
659 Insurance - Health and Life	3,611	-	3,611
666 Regulatory Commission Expense - Rate Case	-	-	-
675 Miscellaneous Expense	2,341	-	2,341
403 Depreciation Expense	57,011	(20,705) 3	36,306
408 Taxes Other Than Income	12,247	(12,247) 4	-
408.11 Property Taxes	16,118	(225) 5	15,893
409 Income Tax	-	-	-
Total Operating Expenses	\$ 292,490	\$ (33,177)	\$ 259,313
OPERATING INCOME/(LOSS)	\$ (14,421)	\$ 39,378	\$ 24,957
Other Income/(Expense):			
419 Interest and Dividend Income	\$ 465	\$ -	\$ 465
421 Non-Utility Income	10,444	(1,613) 2	8,831
427 Interest Expense	18,136	-	18,136
426 Miscellaneous Non-Utility Expense	14,383	-	14,383
Total Other Income/(Expense)	(21,610)	(1,613)	(23,223)
NET INCOME/(LOSS)	\$ (36,031)	\$ 37,765	\$ 1,734

STAFF ADJUSTMENTS

1 -	METERED WATER REVENUE - Per Company Per Staff	\$ 275,469 <u>280,057</u>	<u>\$ 4,588</u>
	To include Revenue from services provided to Community Buildings owned by the Company that were not charged for the services used.		
2 -	OTHER WATER REVENUES - Per Company Per Staff	\$ 419 <u>2,032</u>	<u>\$ 1,613</u>
	To include Late Payment Charges and Retail Sales		
	NON-UTILITY INCOME - Per Company Per Staff	\$ 10,444 <u>8,831</u>	<u>\$ (1,613)</u>
	To reclassify Late Payment Charges and Retail Sales to Other Water Revenues		
3 -	DEPRECIATION - Per Company Per Staff	\$ 57,011 <u>36,306</u>	<u>\$ (20,705)</u>
	To reflects application of Staff's recommended depreciation rates to Staff's recommended plant balances.		
4 -	TAXES OTHER THAN INCOME - Per Company Per Staff	\$ 12,247 <u>-</u>	<u>\$ (12,247)</u>
	To remove sale taxes		
5 -	PROPERTY TAXES - Per Company Per Staff	\$ 16,118 <u>15,893</u>	<u>\$ (225)</u>
	To reflect property tax expense using the Arizona Department of Revenue property method.		

OPERATING INCOME ADJUSTMENT No. 3 - DEPRECIATION EXPENSE

LINE NO.	ACCT NO.	DESCRIPTION	UTILITY PLANT IN SERVICE BALANCES	FULLY/ NON-DEPRECIABLE PLANT BALANCES	DEPRECIABLE PLANT IN SERVICE	DEPREC. RATE	DEPRECIATION EXPENSE
1	301	Organization Costs	\$ -		\$ -	0.00%	\$ -
2	302	Franchise Costs	-		-	0.00%	-
3	303	Land & Land Rights	55,443	55,443	-	0.00%	-
4	304	Structures & Improvements	86,125		86,125	3.33%	2,868
5	307	Wells & Springs	508,699		508,699	3.33%	16,940
6	311	Electric Pumping Equipment	298,335	277,413	20,922	12.50%	2,615
7	320	Water Treatment Equipment	-		-		-
8	320.1	Water Treatment Plants	64,137		64,137	3.33%	2,136
9	320.2	Solutions & Feeders	-		-	20.00%	-
10	320.3	Arsenic Remediation Plant	-		-		-
11	330	Distribution Reservoirs & Standpipes	-		-		-
12	330.1	Storage Tank	107,780		107,780	2.22%	2,393
13	330.2	Pressure Tanks	-		-	5.00%	-
14	331	Transmission & Distribution Mains	790,522		790,522	2.00%	15,810
15	333	Services	12,032		12,032	3.33%	401
16	334	Meters & Meter Installations	25,199	18,200	6,999	8.33%	583
17	335	Hydrants	6,095		6,095	2.00%	122
18	336	Backflow Prevention Devices	-		-	6.67%	-
19	339	Other Plant & Misc. Equip.	6,509		6,509	6.67%	434
20	340	Office Furniture & Fixtures	24,139		24,139	6.67%	1,610
21	340.1	Computer & Software	589	589	-	20.00%	-
22	341	Transportation Equipment	35,414	29,364	6,050	20.00%	1,210
23	342	Store Equipment	-		-	4.00%	-
24	343	Tools & Work Equipment	26,117		26,117	5.00%	1,306
25	344	Laboratory Equipment	-		-	10.00%	-
26	345	Power Operated Equipment	-		-	5.00%	-
27	345	Communications Equipment	48,852	48,852	-	10.00%	-
28	347	Miscellaneous Equipment	-		-	10.00%	-
29	348	Other Tangible Plant	73,330	73,330	-	10.00%	-
30		Total	\$ 2,169,317	\$ 503,191	\$ 1,666,126		\$ 48,427
31		Less: Amortization of Contributions			\$ 542,970	2.23%	\$ 12,121
32		Staff Recommended Depreciation Expense					\$ 36,306
32		Company Proposed Depreciation Expense					57,011
33		Increase/(Decrease) to Depreciation Expense					<u>(20,705)</u>

OPERATING INCOME ADJUSTMENT No. 5 - PROPERTY TAXES

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	\$ 284,270	\$ 284,270
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	\$ 568,540	\$ 568,540
4	Staff Recommended Revenue	\$ 284,270	\$ 296,739
5	Subtotal (Line 4 + Line 5)	\$ 852,810	\$ 865,279
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	\$ 284,270	\$ 288,426
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	\$ 568,540	\$ 576,853
10	Plus: 10% of CWIP	-	-
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	\$ 568,540	\$ 576,853
13	Assessment Ratio	18.00%	18.00%
14	Assessment Value (Line 12 * Line 13)	\$ 102,337	\$ 103,833
15	Composite Property Tax Rate - Obtained from ADOR	15.53010%	15.53010%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	\$ 15,893	
17	Company Proposed Property Tax	15.53%	
18	Staff Test Year Adjustment (Line 16 - Line 17)	\$ 15,893	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 16,125
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		15,893
21	Increase in Property Tax Due to Increase in Revenue Requirement		\$ 232
22			
23	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		\$ 232
24	Increase in Revenue Requirement		\$ 12,469
25	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.863612%

RATE DESIGN

<u>Monthly Usage Charge</u>	<u>Present Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
5/8"x 3/4" Meter	\$12.00	\$13.50	\$12.20
3/4" Meter	\$12.00	\$13.50	\$18.00
1" Meter	\$18.00	\$21.00	\$30.00
1½" Meter	\$24.00	\$32.00	\$60.00
2" Meter	\$35.00	\$44.00	\$75.00
3" Meter	\$55.00	\$70.00	\$180.00
4" Meter	\$100.00	\$125.00	\$300.00
6" Meter	\$120.00	\$150.00	\$600.00
<u>WIFA Loan Monthly Surcharge</u>			
5/8"x 3/4" Meter	N/A	N/A	TBD
3/4" Meter	N/A	N/A	TBD
1" Meter	N/A	N/A	TBD
1½" Meter	N/A	N/A	TBD
2" Meter	N/A	N/A	TBD
3" Meter	N/A	N/A	TBD
4" Meter	N/A	N/A	TBD
6" Meter	N/A	N/A	TBD
<u>Commodity Rates (Per 1,000)</u>			
<u>Residential-All Meter Sizes</u>			
First 3,000 Gallons	\$3.35	\$3.62	N/A
From 3,001 to 6,000 Gallons	\$4.00	\$4.32	N/A
Over 6,000 Gallons	\$4.66	\$5.03	N/A
<u>Commercial-All Meter Sizes</u>			
First 6,000 Gallons	\$4.00	\$4.32	N/A
Over 6,000 Gallons	\$4.66	\$5.03	N/A
<u>5/8 x 3/4" & 3/4" Meter- Residential</u>			
First 3,000 Gallons	\$3.35	\$3.62	\$3.40
From 3,001 to 6,000 Gallons	\$4.00	\$4.32	\$4.20
Over 6,000 Gallons	\$4.66	\$5.03	\$5.00
<u>5/8 x 3/4" & 3/4" Meter- Commercial</u>			
First 6,000 Gallons	N/A	N/A	\$4.20
Over 6,000 Gallons	N/A	N/A	\$5.00
<u>1" Meter- Residential and Commercial</u>			
First 20,000 gallons	N/A	N/A	\$4.20
Over 20,000 gallons	N/A	N/A	\$5.00
<u>1½" Meter-Residential and Commercial</u>			
First 55,000 gallons	N/A	N/A	\$4.20
Over 55,000 gallons	N/A	N/A	\$5.00
<u>2" Meter-Residential and Commercial</u>			
First 72,000 gallons	N/A	N/A	\$4.20
Over 72,000 gallons	N/A	N/A	\$5.00
<u>3" Meter-Residential and Commercial</u>			
First 200,000 gallons	N/A	N/A	\$4.20
Over 200,000 gallons	N/A	N/A	\$5.00
<u>4" Meter-Residential and Commercial</u>			
First 340,000 gallons	N/A	N/A	\$4.20
Over 340,000 gallons	N/A	N/A	\$5.00
<u>6" Meter-Residential and Commercial</u>			
First 700,000 gallons	N/A	N/A	\$4.20
Over 700,000 gallons	N/A	N/A	\$5.00

RATE DESIGN (cont.)

<u>Standpipe/Bulk</u>				
Per 1,000 Gallons	\$9.20		\$12.00	\$9.50
<u>Coin-Operated Standpipe</u>				
Per 25 Gallons	0.25		N/A	0.25
Per 20 gallons	N/A		0.25	N/A
<u>Filtered Water Dispenser</u>				
Per Gallon	0.25		0.25	0.25

Service Line and Meter Installation Charges

Meter Sizes	Current Total Charges	Company Proposed Total Charges	Staff Recommended Service Line Charges	Staff Recommended * Meter Charges	Staff Recommended Total Charges
5/8" x 3/4" Meter	\$350	\$380	\$290	\$90	\$380
3/4" Meter	350	380	290	90	380
1" Meter	420	450	310	140	450
1½" Meter	900	950	500	450	950
2" Meter	1,340	1,400	660	740	1,400
3" Meter	2,100	2,200	900	1,300	2,200
4" Meter	2,800	3,000	1,200	1,800	3,000
6" Meter	\$3,600	\$3,750	\$1,250	\$2,500	\$3,750

<u>Service Charges</u>	<u>Current</u>	<u>Company Proposed</u>	<u>Staff Recommended</u>
Establishment	\$20.00	\$20.00	\$20.00
Establishment (After Hours)	\$24.00	N/A	N/A
After Hours Service Charge	N/A	\$10.00	\$30.00
Reconnection (Delinquent)	\$15.00	\$15.00	\$15.00
Reconnection (Delinquent, After Hours)	\$24.00	N/A	N/A
Meter Test (If Correct)	\$40.00	\$40.00	\$30.00
Deposit	*	*	*
Deposit Interest	*	*	*
Re-Establishment (Within 12 Months)	**	**	**
NSF Check	\$15.00	\$15.00	\$15.00
Deferred Payment	N/A	N/A	N/A
Meter Re-Read (If Correct)	\$10.00	\$10.00	\$10.00
Late Fee (Per month)	1.50%	1.50%	1.50%
Monthly Service Charge for Fire Sprinkler	***	***	***
* Per Commission Rules (R14-2-403.B)			
** Months off system times the minimum (R14-2-403.D)			
*** 1.00% of Monthly Minimum for a Comparable Sized Meter Connection, but no less than \$5.00 per month. The Service Charge for Fire Sprinklers is only applicable for service lines separate and distinct from the primary water service line.			

In addition to the collection of its regular rates and charges, the Company shall collect from its customers their proportionate share of any privilege, sale or use tax in accordance with R14-2-409.D.5

TYPICAL BILL ANALYSIS

General Service 5/8 X 3/4 - Inch Meter
(Without WIFA Loan Surcharge)

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	3,889	\$ 25.61	\$ 28.20	\$ 2.59	10.11%
Median Usage	2,951	\$ 21.89	\$ 24.18	\$ 2.29	10.46%

Staff Recommend	Gallons	Present Rates	Recommended Rates	Dollar Increase	Percent Increase
Average Usage	3,889	\$ 25.61	\$ 26.13	\$ 0.52	2.03%
Median Usage	2,951	\$ 21.89	\$ 22.23	\$ 0.34	1.55%

Present & Proposed Rates (Without Taxes)
General Service 5/8 X 3/4 - Inch Meter

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Recommended Rates	% Increase
0	\$ 12.00	\$ 13.50	12.50%	\$ 12.20	1.7%
1,000	15.35	17.12	11.53%	15.60	1.6%
2,000	18.70	20.74	10.91%	19.00	1.6%
3,000	22.05	24.36	10.48%	22.40	1.6%
4,000	26.05	28.68	10.10%	26.60	2.1%
5,000	30.05	33.00	9.82%	30.80	2.5%
6,000	34.05	37.32	9.60%	35.00	2.8%
7,000	38.71	42.35	9.40%	40.00	3.3%
8,000	43.37	47.38	9.25%	45.00	3.8%
9,000	48.03	52.41	9.12%	50.00	4.1%
10,000	52.69	57.44	9.01%	55.00	4.4%
15,000	75.99	82.59	8.69%	80.00	5.3%
20,000	99.29	107.74	8.51%	105.00	5.8%
25,000	122.59	132.89	8.40%	130.00	6.0%
50,000	239.09	258.64	8.18%	255.00	6.7%
75,000	355.59	384.39	8.10%	380.00	6.9%
100,000	472.09	510.14	8.06%	505.00	7.0%

TYPICAL BILL ANALYSIS

General Service 5/8 X 3/4 - Inch Meter
(With WIFA Loan Surcharge)

Staff Recommended		Recommended Rates (without Surcharge)	Recommended Rates (with Surcharge)	Dollar Increase	Percent Increase
Average Usage	3,889	\$ 26.13	\$ 29.15	\$ 3.02	11.58%
Median Usage	2,951	22.23	25.25	\$ 3.02	13.59%

General Service 5/8 x 3/4-Inch Meter
(Without Tax)

Gallons	Recommended Rates (without Surcharge)	%	Recommended Rates (with Surcharge)	%
<u>Consumption</u>				<u>Increase</u>
0	\$ 12.20		\$ 15.22	24.75%
1,000	15.60		18.62	19.36%
2,000	19.00		22.02	15.89%
3,000	22.40		25.42	13.48%
4,000	26.60		29.62	11.35%
5,000	30.80		33.82	9.81%
6,000	35.00		38.02	8.63%
7,000	40.00		43.02	7.55%
8,000	45.00		48.02	6.71%
9,000	50.00		53.02	6.04%
10,000	55.00		58.02	5.49%
15,000	80.00		83.02	3.78%
20,000	105.00		108.02	2.88%
25,000	130.00		133.02	2.32%
30,000	155.00		158.02	1.95%
35,000	180.00		183.02	1.68%
40,000	205.00		208.02	1.47%
45,000	230.00		233.02	1.31%
50,000	255.00		258.02	1.18%
75,000	380.00		383.02	0.79%
100,000	505.00		508.02	0.60%

Cash Flow Analysis

Line No.		<i>Company As Filed</i>	<i>Company Proposed</i>	<i>Staff Adjusted</i>	<i>Staff Recommended</i>
1	Operating Revenue:	\$ 278,069	\$ 313,364	\$ 284,270	\$ 296,739
2	Operating Expenses:				
3	Operation and Maintenance	207,114	207,114	\$ 207,114	207,114
4	Depreciation	57,011	57,011	36,306	36,306
5	Property & Other Taxes	28,365	28,365	15,893	16,125
6	Income Tax	-	-	-	-
7	Total Operating Expense	292,490	\$ 292,490	\$ 259,313	\$ 259,545
8					
9	Operating Income	(\$14,421)	\$ 20,874	\$ 24,957	\$ 37,194
10					
11	Interest Expense	18,136	\$ 18,136	\$ 18,136	\$ 18,136
12					
13	Principal Repayment	12,793	\$ 12,793	\$ 12,793	\$ 12,793
14					
15	Refund of Advance	\$ 2,571	\$ 2,571	\$ 2,571	\$ 2,571
16					
17	Cash Flow : (L9+L4-L11-L13-L15)	\$ 9,090	\$ 44,385	\$ 27,763	\$ 40,000
18					
19	DSC				
20	Before Tax : (L9+L4+L6)÷(L11+L13)	1.38	2.52	1.98	2.38
21	After Tax : (L9+L4)÷(L11+L13)	1.38	2.52	1.98	2.38

WIFA LOAN SURCHARGE CALCULATION

Loan Amount: **\$150,000**
Term: **20**
Interest Rate Before Subsidy
WIFA Subsidy Rate:
WIFA Interest rate: **5.25%** If interest rate is not found on TABLE A, use the next highest percentage

Step 1 - Find the Principal and Interest Components of the Annual Surcharge Revenue

\$4,358 Principal (From Loan Amortization Schedule)
7,771 Plus: Interest (From Loan Amortization Schedule)
\$12,129 Debt Service Component of the Annual Surcharge Revenue

Step 2 - Find the Gross Revenue Conversion Factor

0

Step 3 - Find the Incremental Income Tax Factor

0.0

Step 4 - Find the Annual Income Tax Component of Surcharge Related to Principle

0 Incremental Income Tax Factor
\$4,358 Multiplied by : Annual Principal Payment on Loan from Step 1 (Note: Interest Expense is tax deductible)
\$0 Annual Income Tax Component Related to the Principles

Step 5 - Find the Annual Income Tax Component of Surcharge Related to Depreciation Expense

0 Incremental Income Tax Factor
\$36,306 Multiplied by : Depreciation Expense
0 Annual Income Tax Component of Surcharge Related to Depreciation Expense

Step 6 - Find the Net Annual Income Tax Component of Surcharge

0 Annual Income Tax Component Related to the Principles
0 Less: Annual Income Tax Component of Surcharge Related to Depreciation Expense
0 Net Annual Income Tax Component of Surcharge

Step 7 - Find the Annual Surcharge Revenue Requirement Needed for the Loan Including Reserve Fund

\$0 Net Annual Income Tax Component of the Annual Surcharge Revenue (from Step 6)
12,129 Plus: Debt Service Component of the Annual Surcharge Revenue (from Step 1)
2,426 Plus: Annual Reserve Fund Deposit [20% x Principal & Interest (From Step1)]
\$14,555 Total Annual Surcharge Revenue Requirement for the Loan

Step 8 - Find the Equivalent Bills

Equivalent Bills

Col A	Col B	Col C	Col D	Col E
Meter Size	NARUC Multiplier	Number of Customers	Number of Months in Year	Equivalent Bills Col B x C X D
5/8" x 3/4" Me	1	213	12	2,556
3/4" Meter	1.5	0	12	-
1" Meter	2.5	12	12	360
1 1/2" Meter	5	0	12	-
2" Meter	8	16	12	1,536
3" Meter	15	2	12	360
4" Meter	25	0	12	-
6" Meter	50	0	12	-
		243		4,812

Step 9 - Find the Monthly Surcharge for the 5/8" x 3/4" Meter Size Customers

\$14,555 Total Annual Surcharge Revenue Requirement for the Loan (from Step 8)
4,812 Divided by: Total Number of Equivalent Bills
\$3.02 Monthly Surcharge for 3/4" Customers

Step 10 - Find the Monthly Surcharge for the Remaining Meter Size Customers

Equivalent Bills

Col A	Col B	Col C	Col D
Meter Size	NARUC Multiplier	5/8" x 3/4" Customers' Surcharge	Surcharge by Meter Size Col B x C
5/8" x 3/4" Me	1	\$3.02	\$3.02
3/4" Meter	1.5	\$3.02	\$4.54
1" Meter	2.5	\$3.02	\$7.56
1 1/2" Meter	5	\$3.02	\$15.12
2" Meter	8	\$3.02	\$24.20
3" Meter	15	\$3.02	\$45.37
4" Meter	25	\$3.02	\$75.62
6" Meter	50	\$3.02	\$151.24

Ash Fork Development Association, Inc., dba Ash Fork Water Service
Docket Nos. W-01004B-15-0313 & W-01004B-15-0342
Test Year Ended December 31, 2014.

Schedule PNT-7
Page 2 of 2

WIFA LOAN DATA:

Loan Amount Requested	\$150,000		
Down Payment:	\$0		
Amount Financed:	\$150,000		
Number of years:	20	Compounding Periods:	12
Interest rate (r):	5.25%	APR:	5.38%

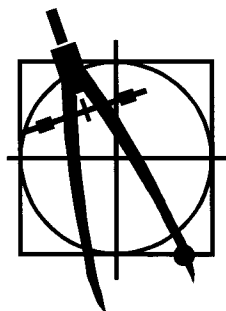
LOAN AMORTIZATION SCHEDULE

Period	Loan payment (1)	Beginning- of-month principal (2)	Payments		End-of-month principal [(2) - (4)] (5)	Annual Interest (6)	Annual Principal (7)	Annual Debt Payment (8)
			Interest [r * (2)] (3)	Principal [(1) - (3)] (4)				
1	\$1,010.77	\$150,000.00	\$656.25	\$354.52	\$149,645.48			
2	1,010.77	149,645.48	654.70	356.07	149,289.42			
3	1,010.77	149,289.42	653.14	357.63	148,931.79			
4	1,010.77	148,931.79	651.58	359.19	148,572.60			
5	1,010.77	148,572.60	650.01	360.76	148,211.84			
6	1,010.77	148,211.84	648.43	362.34	147,849.50			
7	1,010.77	147,849.50	646.84	363.92	147,485.58			
8	1,010.77	147,485.58	645.25	365.52	147,120.06			
9	1,010.77	147,120.06	643.65	367.12	146,752.94			
10	1,010.77	146,752.94	642.04	368.72	146,384.22			
11	1,010.77	146,384.22	640.43	370.34	146,013.89			
12	1,010.77	146,013.89	638.81	371.96	145,641.93	7,771	4,358	12,129.20

WIFA LOAN FINANCIAL ANALYSIS

Test year Income Statement and Capital Structure and Pro Forma
Including Immediate Effects of the Proposed Debt

	Pro forma <u>Permanent Rates</u>	Pro Forma <u>With Surcharge</u>
1 Metered Water Revenue	\$ 292,526	\$ 292,526
2 Unmetered Water Revenue	2181	2,181
3 Other Water Revenues	2032	2,032
4 Estimated Surcharge Revenue	0	14,555
5 Operating Revenue:	<u>\$ 296,739</u>	<u>\$ 311,294</u>
6 Operating Expenses:		
7 Operation and Maintenance	207,114	207,114
8 Depreciation	36,306	36,306
9 Property & Other Taxes	16,125	16,125
10 Income Tax	-	-
11 Total Operating Expense	<u>\$259,545</u>	<u>\$259,545</u>
12		
13 Operating Income	\$37,193.71	\$51,748.71
14		
15 Interest Expense	\$18,136	25,907
16		
17 Principal Repayment	\$12,793	17,151
18		
19 Reserve/Replacement Deposit	\$0	\$2,426
20		
21 Refund of Advance	\$2,571	\$2,571
22		
23 Cash Flow	\$40,000	\$40,000
24		
25 TIER		
26 [10+13] ÷ [15]	2.05	2.00
27 DSC		
28 [8+10+13] ÷ [15+17]	2.38	2.05
29 Cash Coverage Ratio		
30 [8+10+13] ÷ [15]	4.05	3.40
31		



Engineering Report for:
Ash Fork Development Association, Inc.
dba Ash Fork Water Service
Docket Nos. W-01004B-15-0313(Rates) &
W-01004B-15-0342(Financing)
By: Jian W Liu
Utilities Engineer

December 4, 2015

EXECUTIVE SUMMARY

CONCLUSIONS:

1. The Arizona Department of Environmental Quality ("ADEQ") reported that the Ash Fork Development Association, Inc. ("Ash Fork" or "Company") Public Water System ("PWS") No. 13-008, is currently delivering water that meets water quality standards required by 40 C.F.R. 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code ("A.A.C."), Title 18, Chapter 4. (ADEQ compliance status report dated October 26, 2015).
2. The Company is not located in an Active Management Area ("AMA") and is not subject to Arizona Department of Water Resources ("ADWR") AMA reporting and conservation requirements. ADWR reported that Ash Fork is currently in compliance with departmental requirements governing water providers and/or community water systems. (ADWR compliance status report dated December 4, 2015).
3. A check with the Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Compliance Section showed no delinquent compliance items for the Company. (ACC Compliance Section Email dated October 8, 2015).
4. The Company has an approved curtailment tariff on file with the Commission.
5. The Company has an approved backflow prevention tariff on file with the Commission.
6. The existing water system has adequate well production and storage capacity to serve the existing connections and reasonable growth.
7. In light of declining arsenic measurements, Staff believes the Company should monitor the situation for one more year, prior to installing Arsenic Treatment Equipment ("ATE"). If arsenic exceeds 10 ppb after one year, Staff concludes that the Company's proposal to install ATE to treat Well No. 2 water is appropriate and its cost estimates reasonable. The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on ATE.

RECOMMENDATIONS

1. Staff recommends an average annual cost of \$2,543 be adopted for the water testing expense in this proceeding.
2. In the prior rate case, the Company adopted Staff's typical and customary water depreciation rates. These rates are presented in Table H-1 and it is recommended that the Company continue to use these depreciation rates by individual National Association of Regulatory Utility Commissioners ("NARUC") category.
3. Staff recommends that the Company charge separate service line and meter installation charges. The separate service line charges and meter charges recommended by Staff are listed in Table L-1.
4. Staff recommends that Ash Fork be required to file with Docket Control, as a compliance item in this docket, within 90 days of the effective date of the Commission's Decision in this matter, at least three Best Management Practices ("BMPs") in the form of tariffs that substantially conform to the templates created by Staff and available at the Commission's website.. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

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A. INTRODUCTION AND LOCATION OF COMPANY

On September 1, 2015, Ash Fork Development Association dba Ash Fork Water Service (“Ash Fork” Or “Company”) filed an application with the Arizona Corporation Commission (“ACC” or “Commission”) requesting authorization to increase its rates (“Rate Application”). On September 30, 2015, Ash Fork filed an application with Commission requesting authorization to incur long term debt from the Water Infrastructure Finance Authority of Arizona (“WIFA”) in an amount not to exceed \$150,000 for Arsenic Treatment Equipment for Ash Fork Well No. 2 (“Financing Application”). The Arizona Corporation Commission Utilities Division Staff (“Staff” or “Utilities Staff”) engineering review and analysis of both applications is presented in this report.

Ash Fork is located approximately 20 miles west of Williams on Interstate 40 in Yavapai County, Arizona. Figure A-1 shows the location of Ash Fork within Yavapai County and Figure A-2 shows the certificated area.

B. DESCRIPTION OF WATER SYSTEM

Ash Fork’s Certificate of Convenience and Necessity includes an area totaling approximately 1.5 square miles. As of December 31, 2014, there were 466 water customers including 223 metered customers, and 243 standpipe customers. The water system was field inspected on November 17, 2015, by Jian W. Liu, Staff Utilities Engineer, in the accompaniment of Lewis Hume, Operator and Manager for the Company.

The Ash Fork water system consists of two wells, two water storage tanks with a total storage capacity of 1,000,000 gallons, and a distribution system. Detailed plant facility descriptions follow:

Table 1 Well Data

Well Number	ADWR ID No.	Pump HP	Pump GPM	Casing Size(in) & Depth(ft)	Meter Size(in)	Year Drilled
1	55-604624	60	155	12 and 1700	4	1975
2	55-590950	60	130	12-9.5 and 1302	6	2002
Total			285			

Note: GPM = gallons per minute.

Table 2 Storage Tanks

Capacity (Gallons)	Quantity (Each)	Location
500,000	2	Near HWY 89
Total: 1,000,000		

Table 3 Water Mains

Diameter (inch)	Material	Length (ft)
2	PVC	1,790
2	Steel	8,281
4	PVC	11,296
6	PVC	15,000
8	PVC	719
8	Ductile/PVC	350/1,614

Table 4 Customer Meters

Size	Quantity
5/8 x 3/4-inch	213
3/4-inch	
1- inch	12
1-1/2-inch	
2-inch	16
Turbo 3	2
Turbo 4	
Turbo 6	
Total	243

Table 5 Fire Hydrants

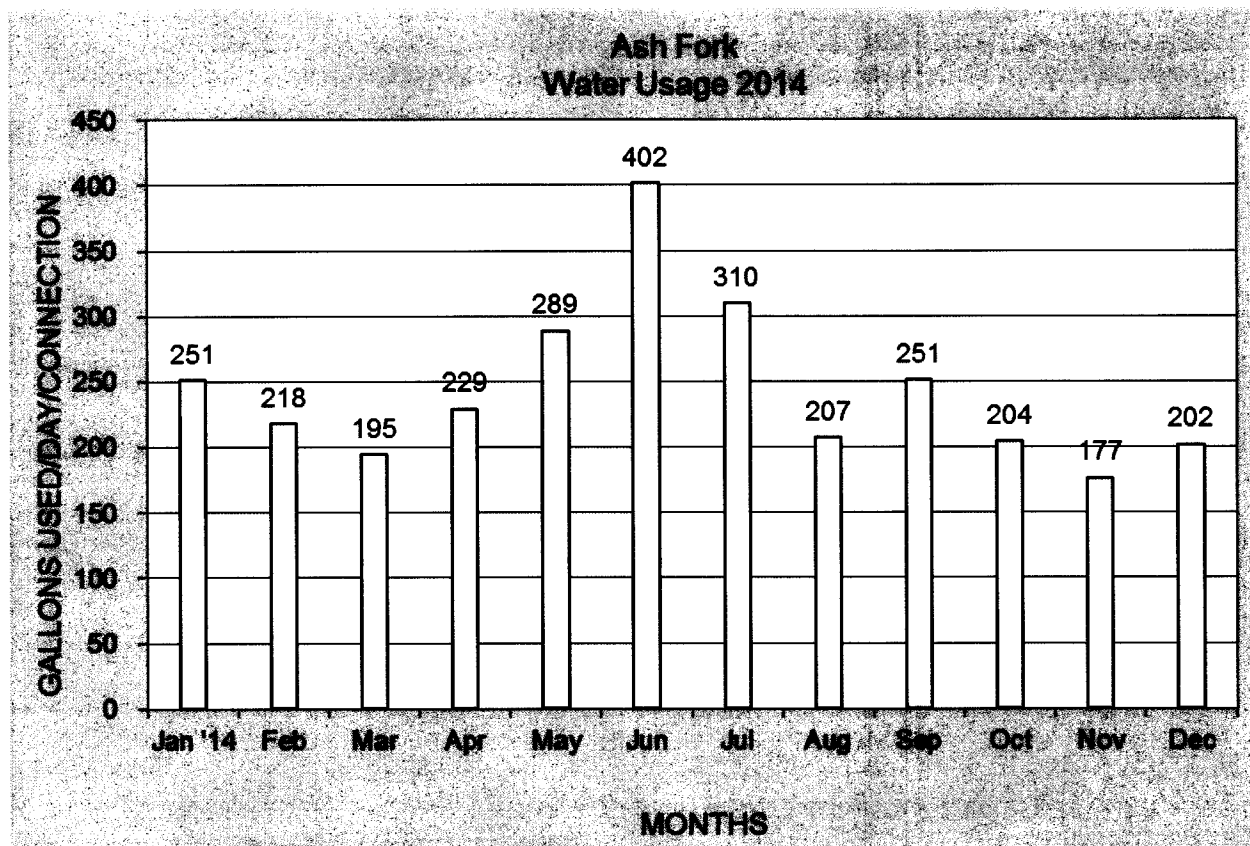
Size	Quantity
Standard	4
Other	

C. WATER USE

Water Sold

Based on the information provided by Ash Fork, water use for the test year is presented in Figure C-1. Customer consumption experienced a high monthly average water use of 402 gallons per day ("GPD") per customer and a low monthly average water use of 177 GPD per connection for an average annual use of 245 GPD per connection.

Figure C-1. Water Use



Non-Account Water

Non-account water should be 10 percent or less. The Company reported that the water pumped in 2014 was 34.405 million gallons ("MG"), and water sold was 33.362 MG. Therefore, the Company's water loss during the test year was approximately 3.03 percent.

D. GROWTH

The Company reported 502 customers in 2007. Ash Fork's water system had 466 customers in December 2014. The Company anticipates little or no growth in the next 3 to 5 years.

Water System Analysis

The existing water system has adequate well production and storage capacity to serve the existing connections and reasonable growth.

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

Compliance

ADEQ reported that the Ash Fork drinking water system, Public Water System ("PWS") No. 13-008, is currently delivering water that meets water quality standards required by 40 C.F.R. 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code ("A.A.C."), Title 18, Chapter 4. (ADEQ compliance status report dated October 26, 2015).

Water Testing Expense

The Company is subject to mandatory participation in the Monitoring Assistance Program ("MAP"). Participation in the MAP program is mandatory for water systems which serve less than 10,000 persons (approximately 3,300 service connections).

The Company reported its water testing expense at \$2,657 during the test year. Table A shows Staff's annual monitoring expense estimated at \$2,543 with participation in the MAP. Staff recommends an average annual cost of \$2,543 be adopted for the water testing expense in this proceeding.

Table A Water Testing Expense

Monitoring PWS#13-008 for 2 wells (Tests per 3 years, unless noted.)	Cost per test	No. of tests per 3 years	Total 3 year cost	Annual Cost
Total Coliform – monthly	\$ 20	72	1440	\$480
Inorganics (& secondary)	\$240	2	\$480	\$160
Radiochemical – (1/ 4 yrs)	MAP			MAP
IOC's, SOC's, VOC's				MAP
Nitrates – annual	\$40	6	\$240	\$80

Nitrites	MAP			MAP
Asbestos – per 9 years	MAP			MAP
Lead & Copper – annual	\$50	60	\$3,000	\$1,000
MAP fees (annual)				\$823
Total				\$2,543

F. ARIZONA DEPARTMENT OF WATER RESOURCES (“ADWR”) COMPLIANCE

The Company is not located in an Active Management Area (“AMA”) and is not subject to any AMA reporting and conservation requirements. ADWR reported that Ash Fork is currently in compliance with departmental requirements governing water providers and/or community water systems. (ADWR compliance status report dated December 4, 2015)

G. ACC COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items for the Company. (Compliance Section email dated October 8, 2015)

H. DEPRECIATION RATES

In the prior rate case, the Company adopted Staff’s typical and customary water depreciation rates. These rates are presented in Table H-1 and it is recommended that the Company continue to use these depreciation rates by individual NARUC category.

I. CURTAILMENT PLAN TARIFF

The Company has an approved curtailment tariff on file with the Commission.

J. BACKFLOW PREVENTION TARIFF

The Company has an approved backflow prevention tariff on file with the Commission.

K. BEST MANAGEMENT PRACTICES (“BMPS”)

Staff recommends that Ash Fork be required to file with Docket Control, as a compliance item in this docket, within 90 days of the effective date of the Commission’s Decision in this matter, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff and available at the Commission’s website. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

L. SERVICE LINE AND METER INSTALLATION CHARGES

The Company has proposed changes to its service line and meter installation charges. These charges are refundable advances and the Company's proposed charges are within or below Staff's recommended range for these charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff. Staff recommends that the Company charge separate service line and meter installation charges. The separate service line charges and meter charges recommended by Staff and listed in Table L-1 equal the Company's total proposed charge.

Table L-1. Service Line and Meter Installation Charges

Meter Sizes	Current Total Charges	Company Proposed Total Charges	Staff recommended Service Line Charges	Staff recommended * Meter Charges	Staff recommended Total Charges
5/8" x 3/4"	350	380	290	90	380
3/4"	350	380	290	90	380
1"	420	450	310	140	450
1-1/2"	900	950	500	450	950
2"	1,340	1,400	660	740	1,400
3"	2,100	2,200	900	1,300	2,200
4"	2,800	3,000	1,200	1,800	3,000
6"	3,600	3,750	1,250	2,500	3,750

*Note: Meter charge includes meter box or vault.

M. FINANCING APPLICATION

On September 30, 2015, Ash Fork filed an application with Commission requesting authorization to incur long term debt from the WIFA of Arizona in an amount not to exceed \$150,000 for Arsenic Treatment Equipment for Ash Fork Well No. 2.

As discussed in the ADEQ compliance Section above, on October 26, 2015 ADEQ reported that the Ash Fork drinking water system is currently delivering water that meets water quality standards. The arsenic level at Well No. 2 has decreased from 11.1 parts-per-billion ("ppb") in 2014 to 10.1 ppb in 2015 based on annual average. The Maximum Contaminant Level ("MCL") for arsenic is 10.0 ppb.

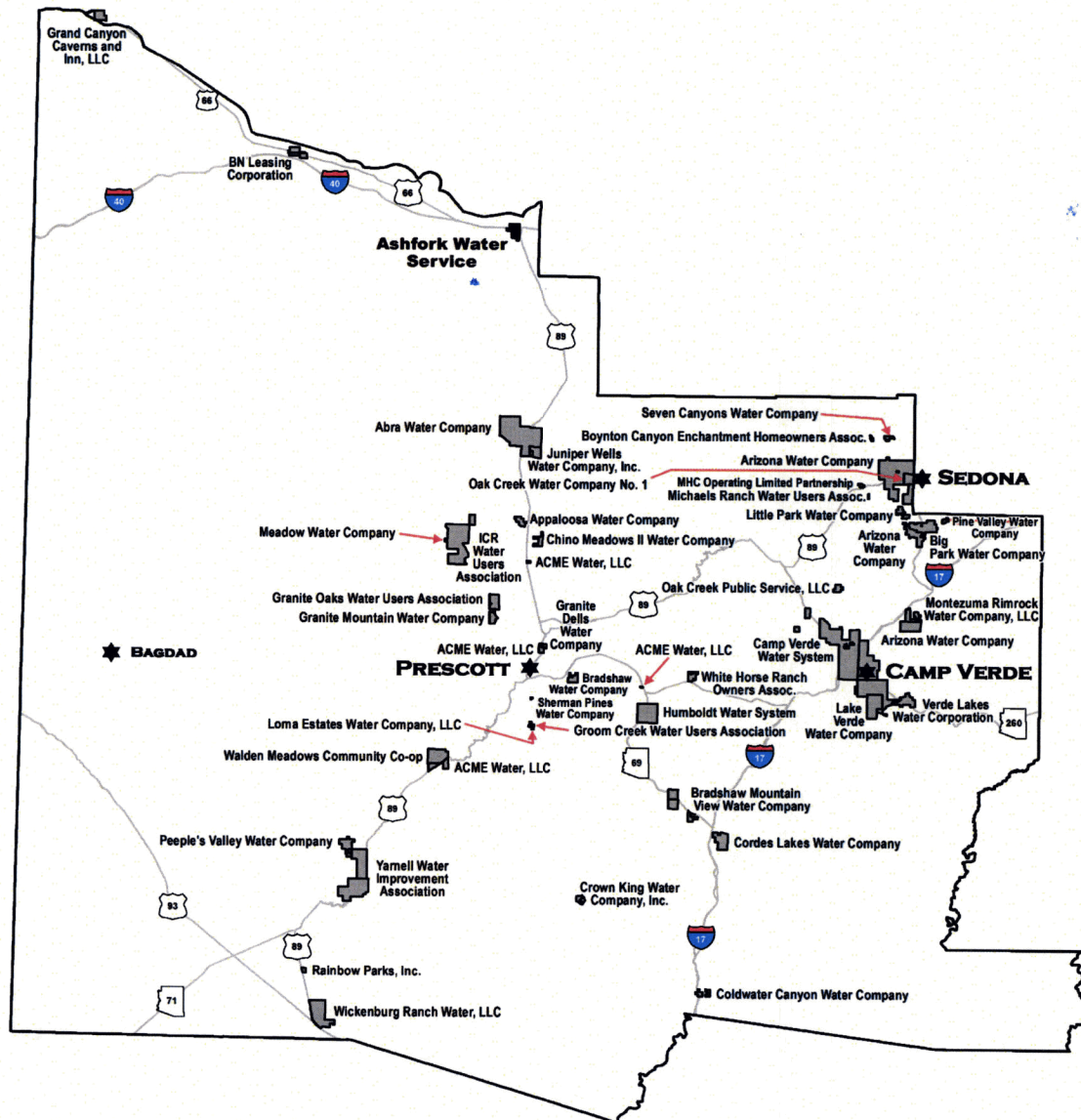
Table M-1

Arsenic Test Results			
Date	mg/L	ppb	RAA (ppb)*
9/24/2013	0.010	10.0	
11/21/2013	0.012	12.0	
3/14/2014	0.0106	10.6	
6/24/2014	0.0121	12.1	
9/22/2014	0.0107	10.7	
12/9/2014	0.011	11.0	11.1
3/24/2015	0.0092	9.2	10.75
6/22/2015	0.0103	10.3	10.03
9/1/2015	0.0100	10.0	10.1

*RAA: Running Annual Average

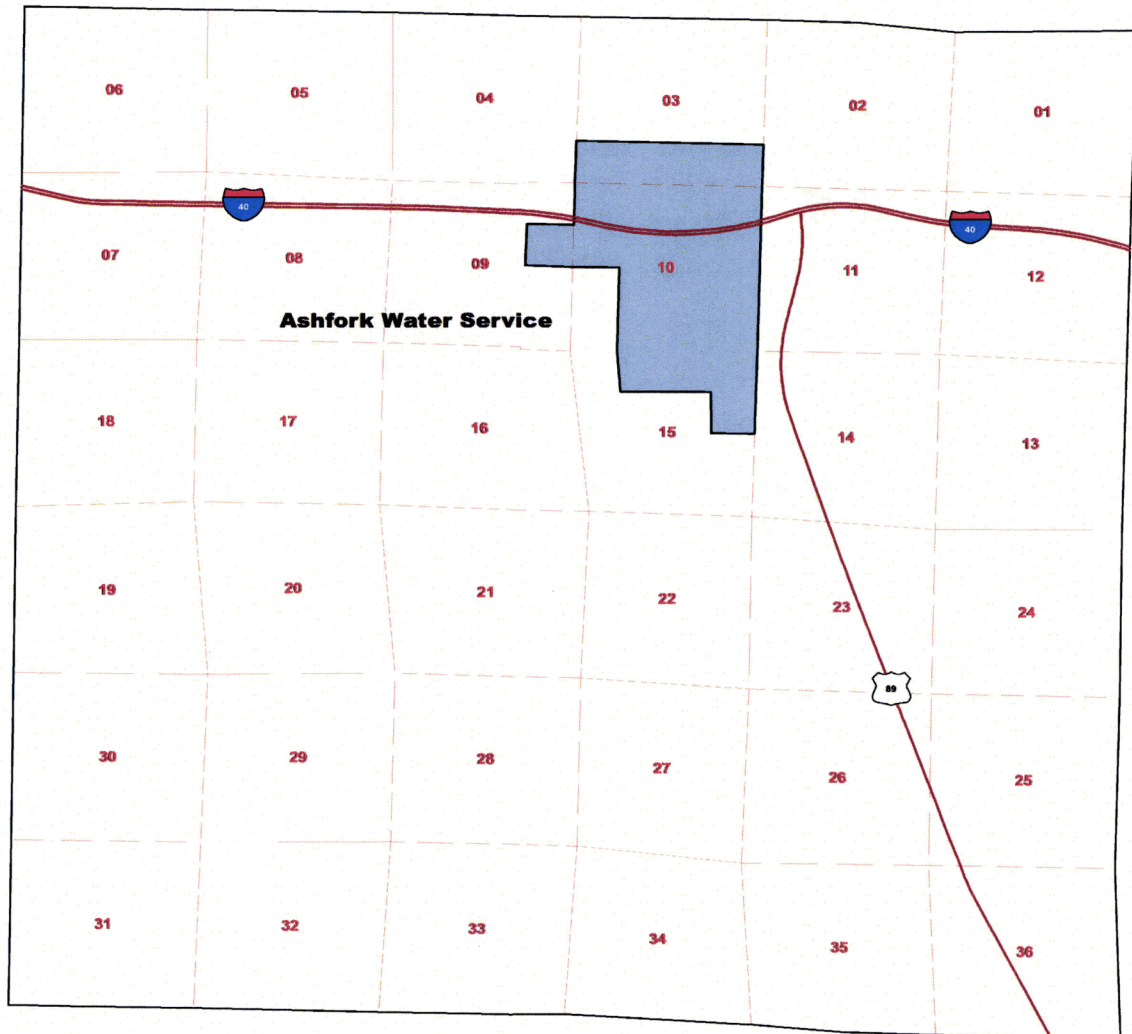
In light of declining arsenic measurements, Staff believes the Company should monitor the situation for one more year, prior to installing Arsenic Treatment Equipment ("ATE"). If arsenic exceeds 10 ppb after one year, Staff concludes that the Company's proposal to install ATE to treat Well No. 2 water is appropriate and its cost estimates reasonable. The Company shall file documentation after one year demonstrating arsenic in excess of 10 ppb prior to expending money on ATE.

YAVAPAI COUNTY



A-1. County Map

Y A V A P A I C O U N T Y



A-2. Certificated Area

Table H-1. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	10	10.00